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THE AMERICAN

ELEVATOR

AND

GRAIN TRADE.

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A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

PUBLISHED BY
MITCHELL BROS. & CO. { VOL XXIX.

CHICAGO, ILLINOIS, AUGUST 15, 1910.

No. 2. { ONE DOLLAR PER ANNUM.
SINGLE COPIES, TEN CENTS.

WE ARE MANUFACTURERS
OF
GRAIN ELEVATOR MACHINERY
FOR
Elevating, Conveying and Transmitting Power

Bucket Elevators
Belt Conveyors
Screw Conveyors
Friction Clutches
Bearings

Car Pullers
Power Shovels
Rope Drives
Shafting
Pulleys

Get our prices on your Specifications before buying.

STEPHENS-ADAMSON MFG. CO.
MAIN OFFICE AND WORKS, AURORA, ILL.
NEW YORK OFFICE—50 Church St.

CHICAGO OFFICE—First National Bank Bldg.



Grain
Elevator
Belting

of special construction

Best Made
and Cheapest

—Get our prices—

THE
GUTTA PERCHA
AND RUBBER
MFG. CO.

224-226 Randolph Street
CHICAGO

WE MAKE EVERYTHING FOR THE GRAIN ELEVATOR



Friction Clutches
Sprocket Wheels
Link Belting
Screw Conveyors
Belt Conveyors
Power Shovels
Rope Drives

Car Pullers
Car Loaders
Shafting
Pulleys
Bearings
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Wagon Dumps
Bucket Bolts

Boot Tanks
Turnheads
Garner Irons
Dock Spouts
Steel Legs
Belt Tighteners

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SKILLIN & RICHARDS MFG. CO., Chicago

MINNEAPOLIS SEED CO.

SEEDS

Minneapolis,

Minnesota

The Engine for the Grain Elevator

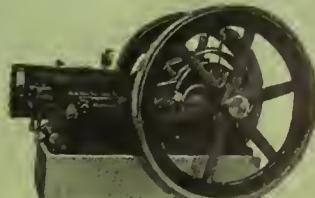
FOOS

Gas Engine Superiority

IS PROVEN BY A RECORD OF TWENTY-ONE YEARS

WE ARE THE LARGEST GASOLINE
ENGINE BUILDERS IN THE WORLD
Send for FOOS CATALOGUE No. 39
and READ IT.

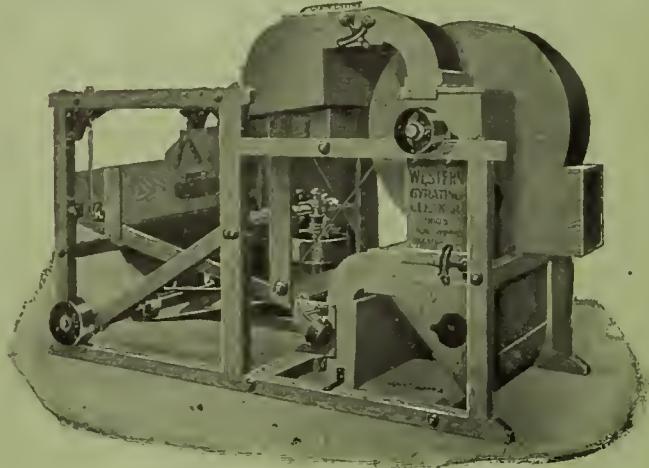
FOOS GAS ENGINE COMPANY
SPRINGFIELD, OHIO



A LATE CORN CROP

Crop estimates show that the increased corn acreage this year means a larger yield than ever; more corn for YOU to handle. Some of it, however, will be late. The late corn will not be as easy to put in a marketable condition as that which matures earlier. Now then, Mr. Elevator Man, here is your opportunity to equip your elevator with machines that will handle all kinds, conditions and quality of corn.

Machines that are made in the heart of the corn belt and that are the product of years of study to meet all requirements—The "Western" line of Shellers and Cleaners.



"WESTERN" GYRATING CLEANER.



"WESTERN" PITLESS SHELLER.

We illustrate herewith the "Western" Pitless Sheller and "Western" Gyrating Cleaner, the best machines that time, money and skill can make. For your own interest, let us send you descriptive matter. Tell us your requirements. We can make good.

Send for our Catalog No. 26 which describes our line of Shellers, Cleaners, and Complete Elevator Equipment.

UNION IRON WORKS, Decatur, Illinois

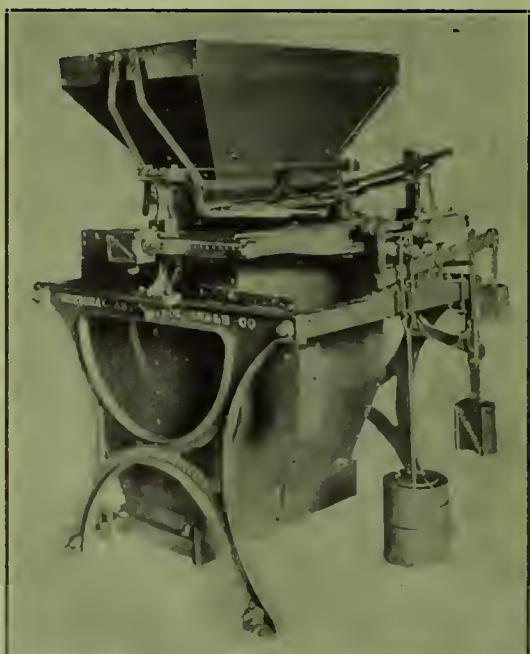
1221-1223 Union Avenue

KANSAS CITY, MO.

You Are Fooled

No
Beam
Jerk
on
the
"National"

60 Days Free
Trial



If
You
Believe

that the accuracy of an Automatic Scale depends altogether upon the beam.

Save \$100.

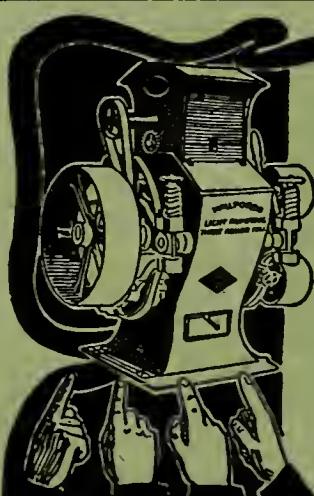
An accurate beam is absolutely necessary but there is something else. Let us tell you why the "National" is the most popular scale today.

Always Yours to Please. Get the Best.
Buy a "National."

**THE NATIONAL
AUTOMATIC SCALE COMPANY**
215 E. Douglas St., BLOOMINGTON, ILL.
Northwestern Agents: E. A. Pynch & Co., 311 Third Ave. S., Minneapolis, Minn.

SEEDS

THE ALBERT DICKINSON CO.
DEALERS IN
GRASS SEEDS, CLOVERS, FLAX SEED, LAWN GRASS, BEANS,
PEAS, POPCORN, BIRD SEEDS, BUCKWHEAT, BAGS, ETC.
CHICAGO, ILL. Branch: Minneapolis, Minn.



4 GOOD POINTERS ON THE Willford Three-Roller Feed Mill.

- (1) It is Easy to Handle.
- (2) It is Strong and Durable, but Simple.
- (3) It will Grind the Most Feed with the Least Power.
- (4) It can Always be Relied Upon.

Write for Circulars and Prices.

WILLFORD MANUFACTURING CO.,
303 3d St. South, MINNEAPOLIS, MINN.



Good Spouts Reasonable Prices

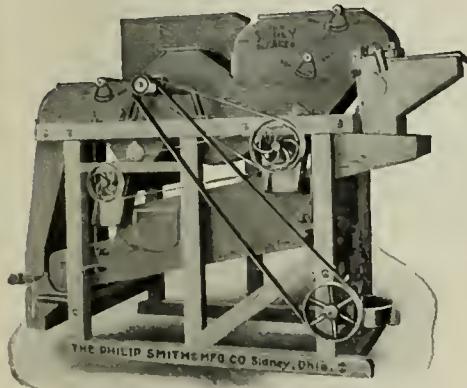
That is what you get when you buy the

Gerber Improved No. 2 Distributing Spout

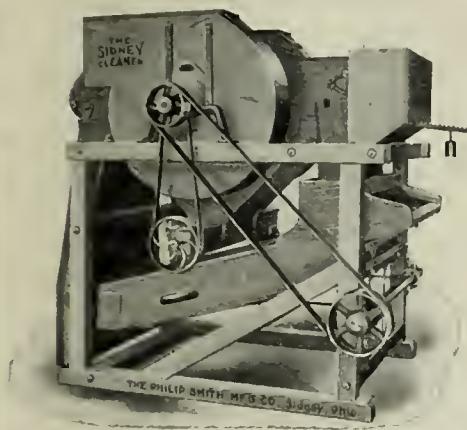
Will prevent mixing of grain. Can be operated from working floor. I make a specialty of elevator and mill spouting. For particulars write

J. J. Gerber, MINNEAPOLIS
MINNESOTA

THE SIDNEY LINE of Matchless Shellers AND Cleaners



Sidney Oscillating Corn and Grain Cleaner.



The Sidney Dustless Warehouse and Elevator Receiving Separator.

Connersville, Ind., Dec. 13, 1909.
Dear Sirs:—

Yours of 11th in regard to Sheller will say that both Sheller and Cleaner give good satisfaction. The Cleaner as a Corn Cleaner does excellent work.

Yours truly,
J. R. STAFFORD.

Burkettsville, Ohio.

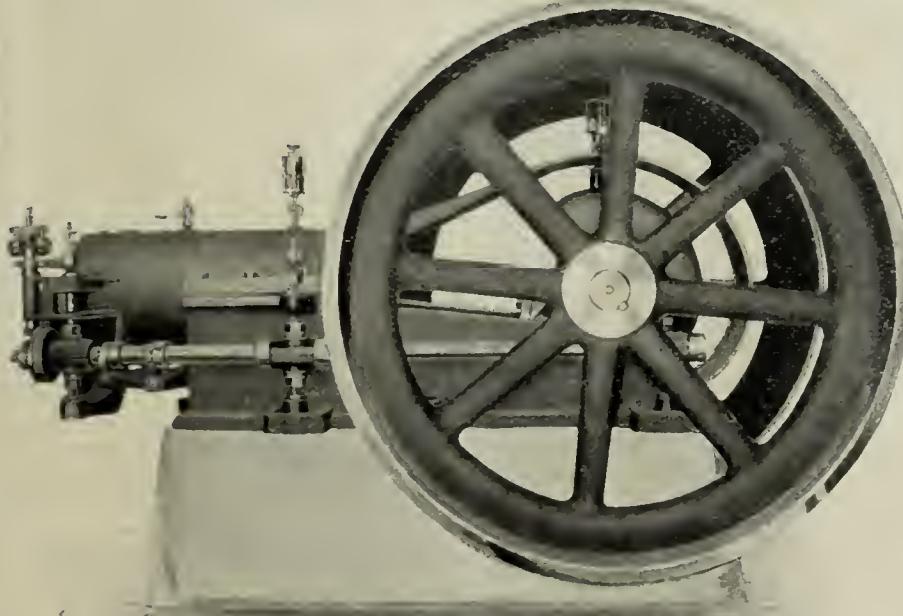
Dear Sirs:—
In reply to your inquiry of 2nd inst., will say I installed one of your Cleaners in my new elevator here at this place last spring and had occasion to give it a thorough test since that time, as our grain here, especially wheat, came in a very bad condition, there being so many broken straws and they were heavy and the threshers claimed they could not clean them out, but I could with your cleaner get almost every straw out. Oats were also hard to clean on account of the lightness of the grain and the ragweed in them, but I could clean them all O. K. As for corn I have not tried it, as I do not run any corn through my new house; it is for small grain only.

Yours truly,
S. S. EARHART.

THE PHILIP SMITH
MFG. CO.
SIDNEY, OHIO
Complete Stock
Carried at
ENTERPRISE, KANS.

Gas Power for the Elevator

Place a St. Marys Gas Engine in
your elevator and stop your coal bills.



The gas engine in the elevator is the most up-to-date power that can be used.

CLEAN POWER.

SAFE POWER.

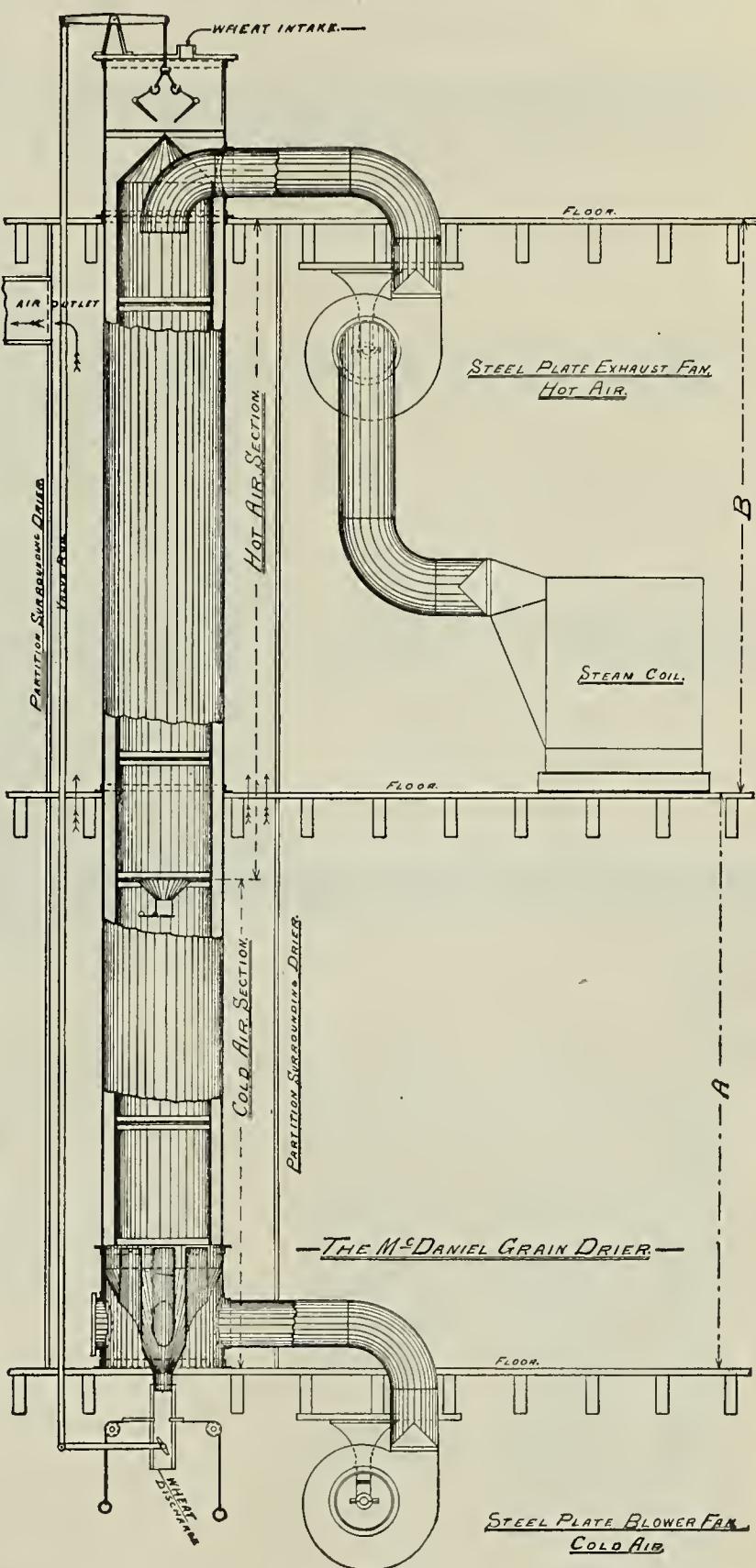
Low cost of operation. Always ready without keeping up steam.

With a St. Marys engine all the fuels may be handled with ease:—gasoline, distillate, naptha, kerosene, producer and natural gas.

2½ to 480 H. P.

ST. MARYS MACHINE CO.
Factory: ST. MARYS, OHIO

McDANIEL GRAIN DRIER



Will remove any percentage of moisture desired.

Hot or cold air or both can be used.

Built for any capacity.

Guaranteed satisfaction.

Hundreds in daily use.

NIAGARA SEPARATORS AND OAT
CLIPPERS ARE UNSURPASSED

RICHMOND MFG. CO. LOCKPORT
N. Y.
Established 1863

J. C. WEST & CO.

We are perfectly equipped to handle your business, no matter how large or small. Satisfaction guaranteed. Correspondence invited.

CONSIGNMENTS

Consignments our Specialty. Liberal advances; quick sales; high prices; prompt returns; honest services. Let us send you our daily market report.

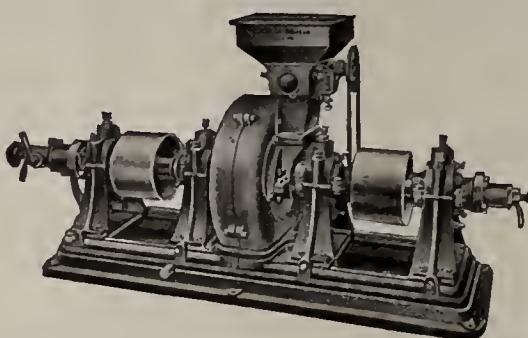
BROKERAGE

Quick, efficient service in selling to arrive. We have two men operating on the Memphis Merchants Exchange and working the Trade.

MEMPHIS, TENN.

The Best Market
in the
Southwest.

ARE YOU TROUBLED



With Hard or
Tough Stock
in Your Feed
Grinding?

If so the

Monarch Attrition Mill

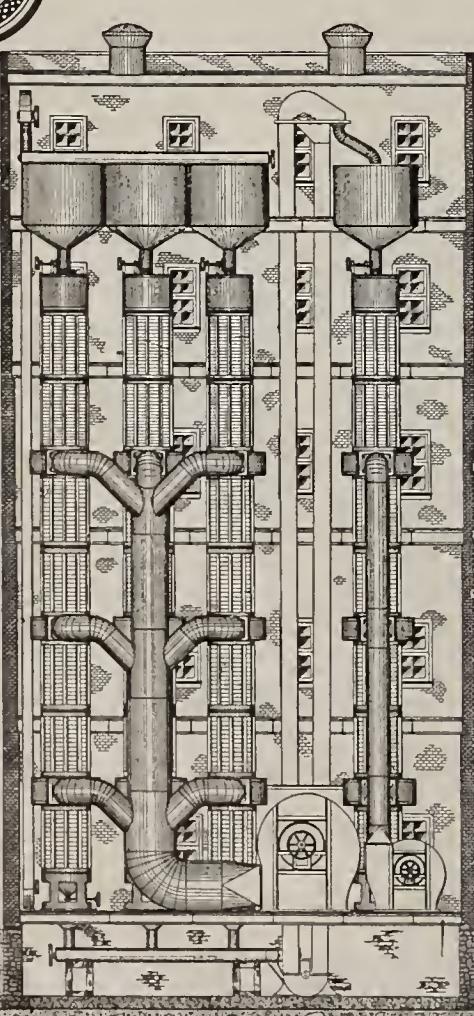
is just what you need.

It grinds every particle of stock, sharp, clean and fine, and there are no annoying break downs.

Let us tell you more about the Monarch.

Ask for a copy of our Feed and Meal Milling Catalogue No. 26

SPROUT, WALDRON & COMPANY
Box 320, Muncey, Pa.



“EUREKA”

Patented Grain Dryer, Cooler and Conditioner

Dries and aerates uniformly and economically wet or damp grain. Our claims are substantiated by users. Here is the system and what the user reports.

Toledo, Ohio, July 2nd, 1910.

The S. Howes Company,
Silver Creek, N. Y.

Gentlemen:

We have your letter of the 1st inst., and are returning the Bond under separate cover, as we consider the Dryers all that you represent them to be.

We have given them a severe test, and they have proven satisfactory. The drying is uniform, and the capacity is larger than they were purchased for.

The corn on which they were tested contained before drying 19 and 20% of moisture, and the tests show that 5% was taken out of corn dried at the rate of 800 bushels per hour, and 2% at 1200 per hour.

The principles are correct and we are well pleased with our plant. Wishing you success, we remain,

Very truly yours,
The East Side Iron Elevator Company,
A. W. Boardman, Sec'y.

We cover our guarantees with a Bond. We accept all the responsibility

SOLE MANUFACTURERS

The S. Howes Company

Originators of the Highest Grade Grain Cleaning Machinery

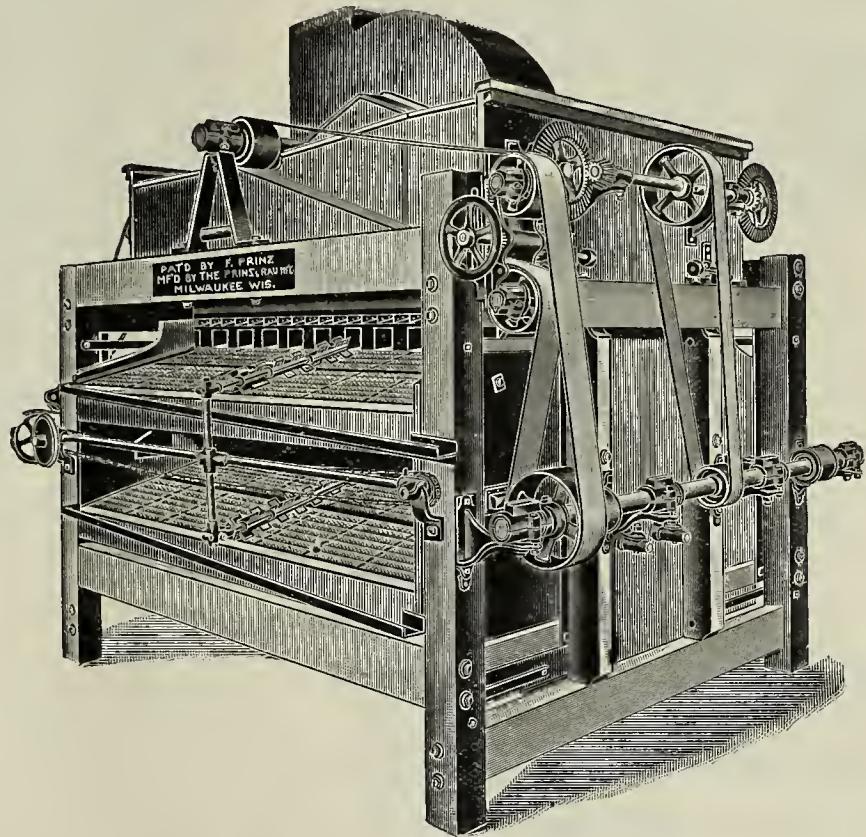
“EUREKA WORKS” - - - SILVER CREEK, N. Y.



Two Grades of Grain

Can be treated independently at the same time on a

Prinz Automatic Separator



In other words, one of these Separators is equivalent to two complete machines.

The Separator can, when desired, mix the two grades in the most perfect way, making it invaluable to all who do a mixing business.

Some Features:

EXTRA WIDE SIEVES, composed of two-thirds coarse sieves and one-third seed or sand sieve.

PATENTED AUTOMATIC SIEVE CLEANERS, working on top of the sieves.

EXTRA STONG FRAME, insuring smooth and steady running.

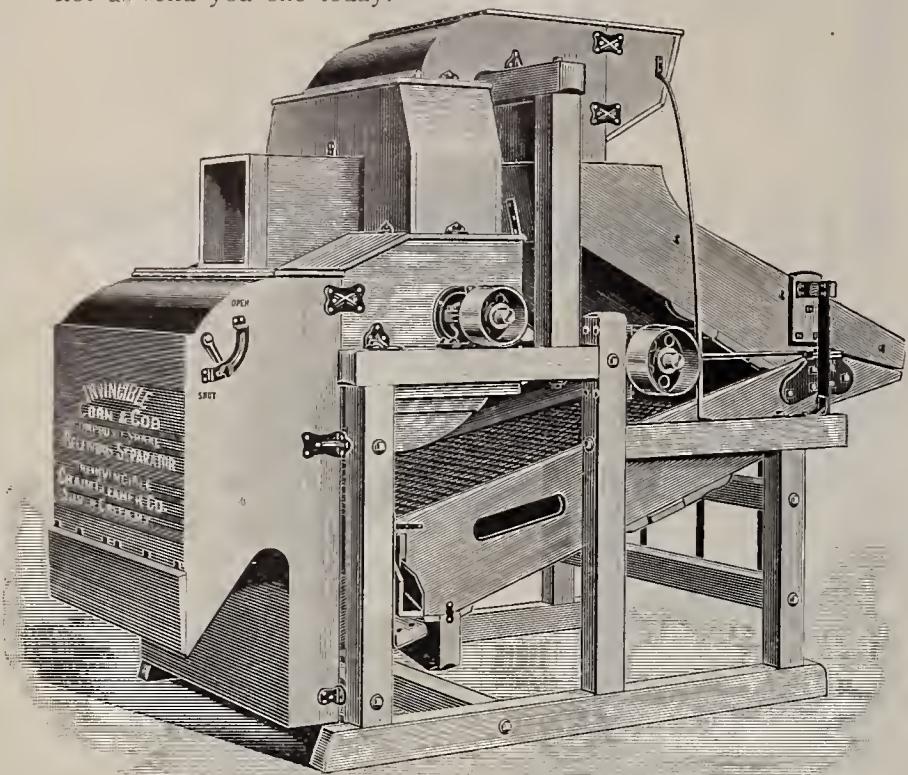
Send us your name and address and we will tell you where you can see our Separators in operation in your vicinity.

THE PRINZ & RAU MFG. CO.
MILWAUKEE, WIS.

Represented by W. G. Clark, 701 Fisher Bldg., Chicago, Ill.; A. H. Kirk, 1-A Chamber of Commerce, Minneapolis, Minn.; F. E. Lehman, 124 Board of Trade, Kansas City, Mo.; C. H. Near, 757 Ellicott Square, Buffalo, N. Y.; M. D. Beardslee, 106 Piquette Ave., Detroit, Mich.
European Representatives, Ingenieur Bureau "Zwijndrecht," Prins Mauritsplein, La, The Hague, Holland.

More of the INVINCIBLE Corn and Cob Separators

are being sold and used today than all others combined—
There is but one reason for it—they do the work better than others.
Let us send you one today.



INVINCIBLE GRAIN CLEANER COMPANY SILVER CREEK, N. Y., U. S. A.

REPRESENTED BY
J. H. Pank, 512 Traders' Bldg., Chicago, Ill.
F. J. Murphy, 225 Exchange Bldg., Kansas City, Mo.
The Strong-Scott Mfg. Co., Minneapolis, Minn.
C. L. Hogle, 526 Board of Trade, Indianapolis, Ind.
Frank E. Kingsbury, Terminal Hotel, St. Louis, Mo.
J. J. Ross Mill Furnishing Co., Portland, Ore.
Chas. H. Sterling, Jefferson House, Toledo, Ohio.
C. Wilkinson, 6027 Chestnut St., Philadelphia, Pa.



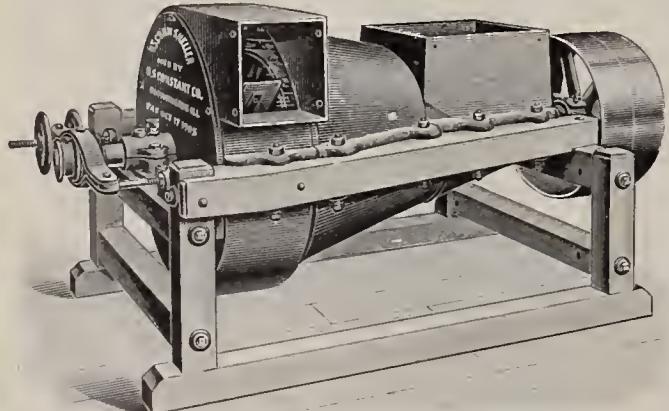
The CONSTANT MAN LIFT

IS ALWAYS READY TO SERVE YOU

It is a pleasure to go to the cupola as the Ball Bearings make it the easiest operated Manlift on the market. The Safety Catch makes it safe. It is quickly adjusted for different weight men and, best of all, the Fire Insurance Company write us they will give users a credit on rates. State distance between floors and receive our Net Price.

The U. S. FAN DISCHARGE CORN SHELLER

has exclusive features which makes it the best of its kind.



NO MORE SUPERFLUOUS CRACKED CORN.

Send us your specifications for lump price.

B. S. CONSTANT CO., Bloomington, Ill.

Traveling Representative: N. A. GRABILL, Anderson, Ind.



Catalog
34

Catalog
34

HELICOID

Helicoid conveyor has a stronger flight and a heavier pipe than the same diameter of old style conveyor, and

Helicoid flight and pipe are put together so they support and strengthen each other.

Helicoid flight has a shovel edge. Other has blunt edge.

Helicoid flight is one continuous strip of metal end to end of pipe. Other is short sections lapped and riveted together every turn or half turn around the pipe.

Helicoid is a smooth, nicely-balanced spiral, and has no joints to wear out and open up.

Helicoid requires fewer repairs, and less power to drive it.

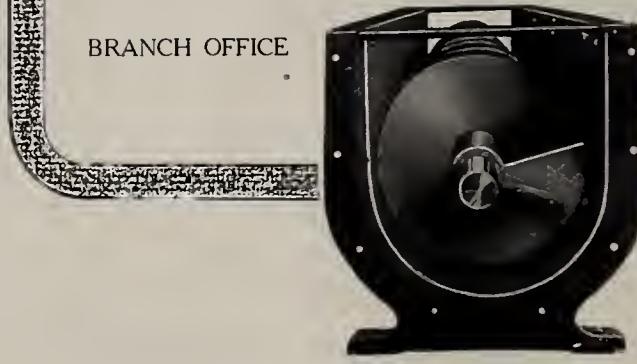
Helicoid costs no more than inferior kinds of conveyor; it's all-round satisfaction at the same price.

Ask about our Steel Conveyor Boxes, too.

H. W. Caldwell & Son Co.

17th St. and Western Ave., Chicago

BRANCH OFFICE



New York:
Fulton Bldg. Hudson
Terminal,
50 Church St.

SMALL COST — BIG RETURNS

This is the story of classified advertising in the "American Elevator and Grain Trade." You can sell your elevator or machinery quickly and cheaply through an ad in its columns

WRITE FOR RATES

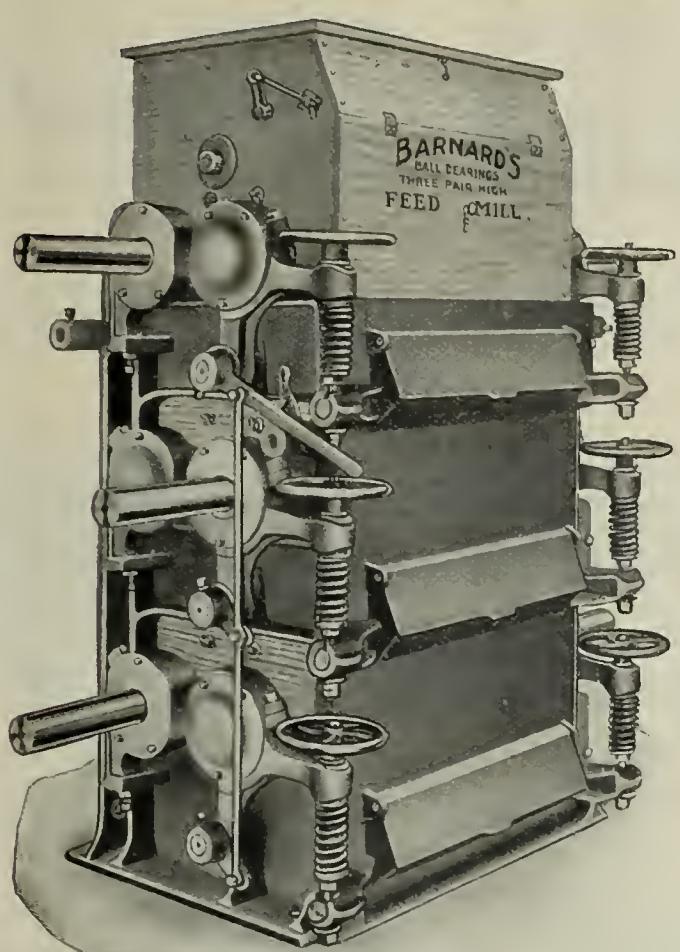
MITCHELL BROS. & CO., 315 Dearborn Street, Chicago, Ill.

Will You Need Elevator Machinery or Supplies This Year?

Prices are advancing—order early, or send for estimates. Best goods—best prices.

GRAIN DEALERS' SUPPLY COMPANY
305 South Third Street Minneapolis, Minn.

General Agents for Avery Automatic Scales for Iowa, Minnesota and the Dakotas. They are accurate, durable, simple.



Mill without Pulleys Showing Style of Ball-Bearings

Barnard's Ball Bearing Feed Mills

The highest running mills of their kind on the market.

The bearings require 50% less power than babbittted bearings.

They also require oiling very seldom and very little care and attention.

As the bearings are absolutely tight no oil can leak out on the mill or floor, thus keeping everything about clean and free from oil.

These mills are made either one, two or three pair high according to the work required.

We also make the Barnard Three Roller Feed Mill with ball or standard bearings.

We make Separators of all kinds for Mills and Elevators, Seourers, Aspirators, Grain Dryers of all capacities and Cereal Mill Outfits.

SEND FOR LATEST CATALOGUE

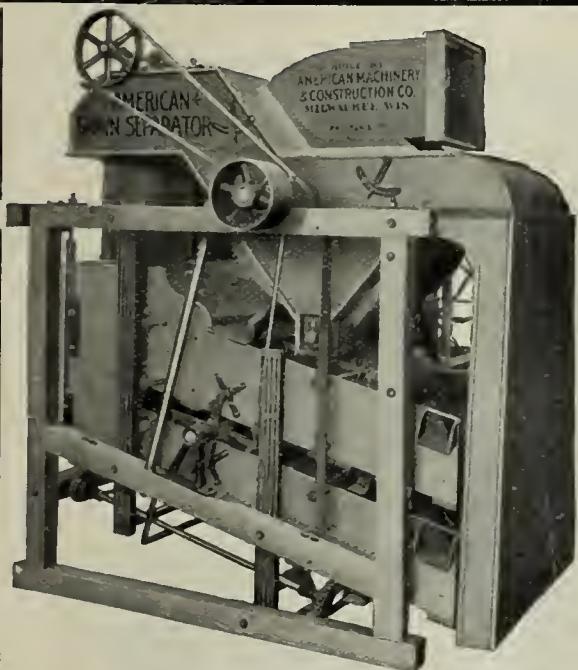
BARNARD & LEAS MFG. CO.

Mill Builders and Mill Furnishers, MOLINE, ILLINOIS

SPECIAL SALES AGENTS

Barnard Mfg. Co., Spokane, Wash.
M. M. Snider, 1533 E. Walnut St., Des Moines, Iowa.
W. S. Brashears, 421 E. Pine St., Springfield, Mo.
Wm. Ebert, 2028 Midland Avenue, Louisville, Ky.
C. B. Donaldson, 568 Oak Street, Columbus, Ohio.

H. J. Creagor, P. O. Box 1595, Salt Lake, Utah.
Geo. J. Noth, Tel. Harrison 5597, 402 Monadnock Block, Chicago
U. C. Darby, Williamsport, Md.
Willford Mfg. Co., Minneapolis, Minn.



Perfect Pneumatic Cleaning, combined with thorough sieve separations are possible only with the

American Grain Separator

¶ Not only does this machine clean more thoroughly, at a much greater capacity than any other, but it also saves 50% in power. It is entirely automatic in operation, requires much less space, runs absolutely quiet, and therefore does not have to be braced to keep it in place.

¶ It is the only grain cleaner which will extract positively all refuse of a lighter nature than the grain to be cleaned. It pneumatically extracts impurities that it is impossible to extract by any other method or device.

Write now for full information, which will be of great value to you.

American Machinery & Construction Co.
MILWAUKEE, WISCONSIN

YOU'LL BE HAPPY
WITH A
"NEW ERA"
Passenger Elevator
It is the EASIEST RUNNING
SAFEST
BEST
It has many exclusive features.
Write for
information and prices.
Sidney Elevator Mfg. Co.
SIDNEY, OHIO.

NEW MARSEILLES DUSTLESS CYLINDER CORN SHELLERS

WE MAKE Hand and
Power Corn Shellers,
Horse Powers, Feed Grinders,
Portable Elevators
and Wagon Dumps, Pump-
Jacks, Grain Elevator
Machinery and Supplies.

Made in Several Sizes,
Both Stationary and Port-
able Styles.

POSITIVELY GUARANTEED to shell either shucked or unshucked corn faster, with less power in proportion to capacity; take the corn off the cobs cleaner; clean both cobs and corn more perfectly; do less crushing or grinding of corn or cobs and save a larger per cent of the corn than any other cylinder sheller on the market. Send for Catalogue.

SPEAKS FOR ITSELF

Gainesville, Texas, May 12, 1908.
Marseilles Mfg. Co., Marseilles, Ill.—Gentlemen:—We purchased the first Shuck Corn Sheller you ever made, some eighteen or twenty years ago. Since then we have bought 12 or 15 of them, representing every improvement, and expect to buy several more this season. We have bought one or more of about every other make and think we are competent judges of such machinery. Your Shellers husk and shell the corn off the cob more thoroughly; save it more completely; clean both the shelled corn and the cobs more perfectly; require less power in proportion to capacity, are more durably constructed and cost less, loss of time and cost of repairs considered, than any sheller we have ever used. We have thrown out every other kind of Corn Sheller we ever bought and have replaced them with yours. KEEL & SON. By J. Z. Keel.

MARSEILLES MANUFACTURING COMPANY, Marseilles, Ill.

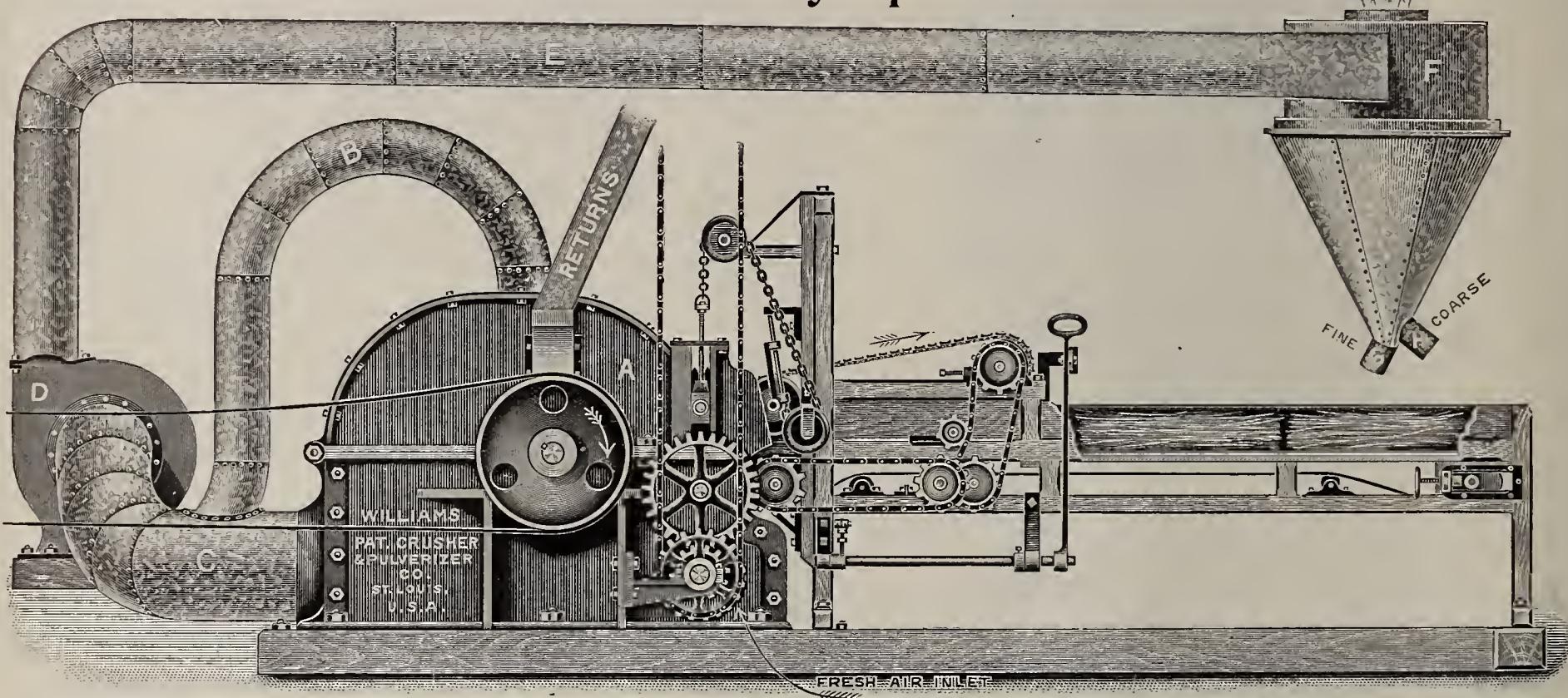
Branch Houses and General Agencies at Principal Distributing Cities.

SCRAP that troublesome Alfalfa Grinder and put in the WILLIAMS SYSTEM—Make Some Money for your Stockholders —GET RESULTS. You can only get such results from

The Williams Patent Alfalfa Grinding System

Made in 6 Sizes.

1550 Machines in Daily Operation.



THE ONLY VERSATILE FEED GRINDER EVER PRODUCED

They will reduce EAR CORN with the HUSK on.
They will reduce ALFALFA HAY from the BALE or from the STACKS.
They will reduce ALFALFA HAY and EAR CORN together.
They will reduce ALFALFA HAY and SHELLED CORN together.
They will reduce ALFALFA HAY and OATS together.
They will reduce ALFALFA HAY and FODDER OF ALL KINDS, with the CORN on.
They will reduce ALFALFA HAY and PEA VINES.
They will reduce EAR CORN ALONE or SHELLED CORN ALONE.
They will reduce OATS ALONE.
They will reduce ALFALFA HAY and two other kinds of CEREALS at the same time, as each machine has three separate feeding places.

We have a corps of competent milling engineers in the field making estimates and taking contracts for the installation of complete alfalfa meal plants, from the stump up.

For Further Information
Write for BULLETIN No. 7

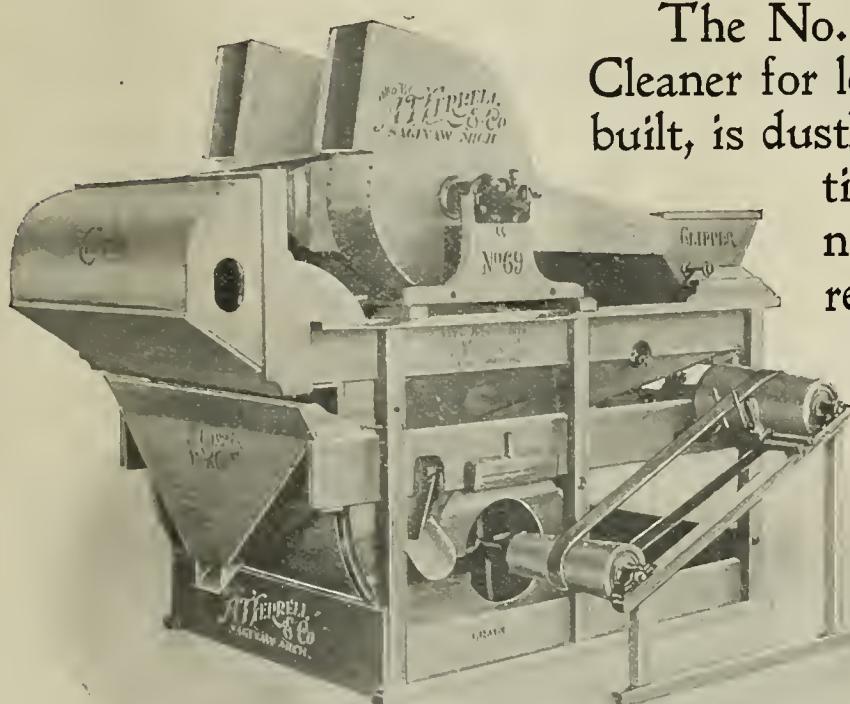
They will reduce ANY FORAGE material or CEREAL, together or separately.
They will reduce GREEN CORN from the field.
They will reduce CLOVER HAY, TIMOTHY or ANY KIND OF STRAW.
They are CUTTERS when desired, GRINDERS when desired and SHREDDERS when desired.
They are COB CRUSHERS when desired.
They will reduce COARSE OR FINE by changing cages.
They will reduce OAT HULLS, RICE HULLS, FLAX SHIVES or any other FOOD MATERIAL.
They produce two grades of goods AT THE SAME TIME, coarse or fine, BY OUR COMBINED SYSTEM OF COLLECTING AND SEPARATING.
They WILL GIVE DOUBLE THE CAPACITY FOR THE POWER EXPENDED AND COST FOR REPAIRS OF ANY KNOWN GRINDER ON EARTH.

Write for Catalog of the Noxon
Automatic Hay, Meal and All Around Feeder

Southwestern Representative: A. G. Olds, Care Manhattan Hotel, Wichita, Kan.
Pacific Coast Representative: O. J. Williams, 428 Monadnock Bldg., San Francisco, Cal.
Texas Representative: D. J. Hayes Co., 615 Washington Ave., Houston, Texas.

THE WILLIAMS PATENT CRUSHER & PULVERIZER COMPANY
2701 North Broadway, ST. LOUIS, MO., U. S. A.

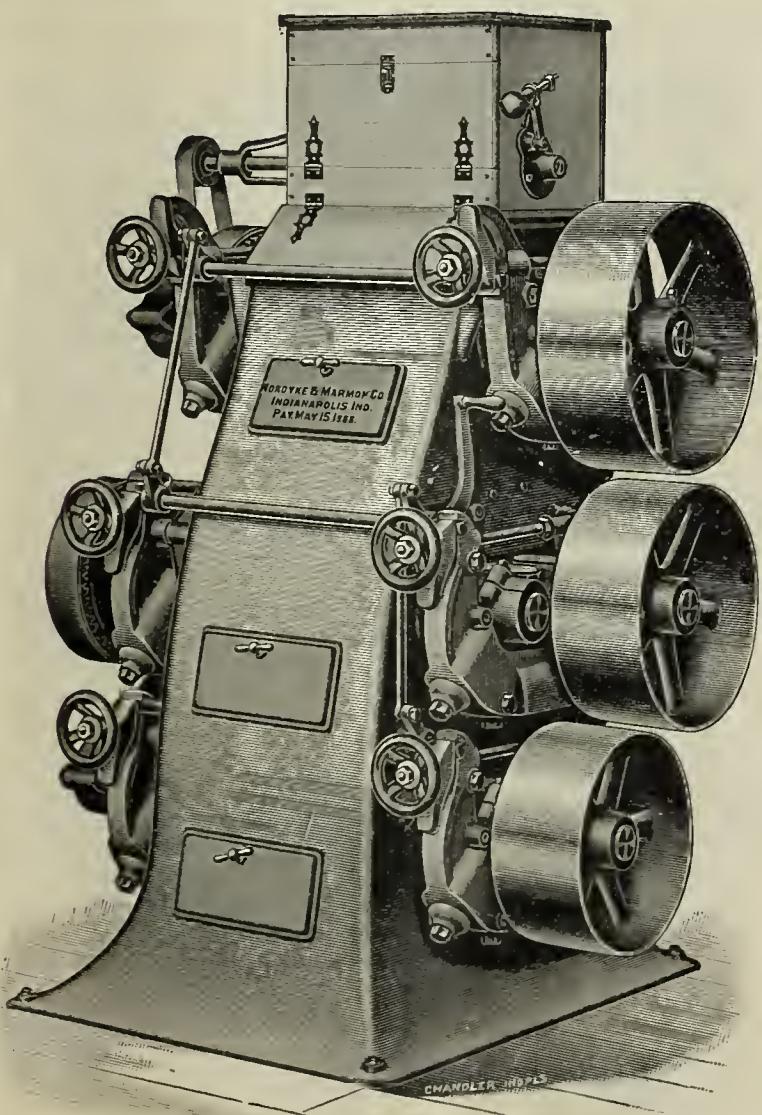
“CLIPPER” Grain and Corn CLEANERS



The No. 69 Clipper is a first class grain receiving Cleaner for local elevators. It has large capacity, is solidly built, is dustless and will make the most difficult separations. It is simple, strong, convenient and will not easily get out of order. It requires less for repairs than any other Grain Cleaner on the market and is always ready for business. Ours is the only successful combination cleaner on the market. We give a 30-day guarantee with each machine.

If you are looking for the best cleaner, we would be glad to show you what we have. Our line of clover seed cleaners are strictly up to date. All sizes and capacity. We can furnish machines with Traveling Brushes, Air Controller and all modern improvements. Send for catalog and discounts.

A. T. FERRELL & CO., :: SAGINAW, W. S., MICH.



The N. & M. Co. THREE-PAIR-HIGH SIX-ROLLER MILL

The most substantial, most economical in cost of maintenance. Has great capacity and requires comparatively small power. The only Six-Roller Mill with drive belts properly arranged to place the belt strain on bottom of bearings, where it belongs. It is not the cheapest mill in first cost, but it is by long odds the cheapest in the long run. It is without question the best roller feed mill on the market. Feed grinding pays best when you have a mill which will do perfectly any kind of grinding required and stand up under hard work without breakages and delays.

Send for Catalogue

ELEVATOR SUPPLIES

We carry a complete stock of Heads and Boots, Elevator Buckets and other Elevator Supplies. All orders are given the very best of attention.

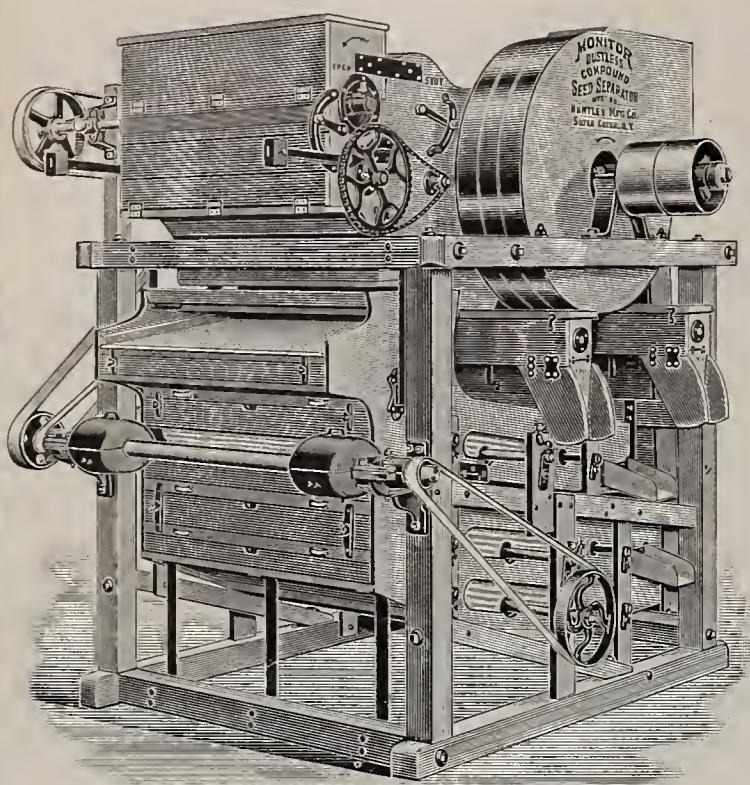
Nordyke & Marmon Company

America's Leading Flour Mill Builders

Established 1851

INDIANAPOLIS, IND.

MONITOR Seed Polisher, Cleaner, Grader



You Cannot Get Results

of this kind on any other seed cleaner.

THE DEAD SEED

in clover and alsyke separated without loss in shrinkage and a perfect separation of

TIMOTHY SEED

—FROM—

ALSYKE

In the world's largest seed dealers' houses this machine is daily doing this work.

MONITOR Bean Polisher, Separator, Grader

These Remarkable Results Are Not Possible With Any Other Machine

The Monitor

will polish, clean and grade beans and peas in one operation.

Will separate and remove all splits.

Will separate and remove all damaged beans and peas, except such as are perfectly smooth and of the same size and weight as the sound ones.

Will remove from 40% to 80% of beans or peas that have been damaged by water, frost, or sweating, which would otherwise have to be picked out by hand.

Will save nearly all hand picking on light shrinkage stock.

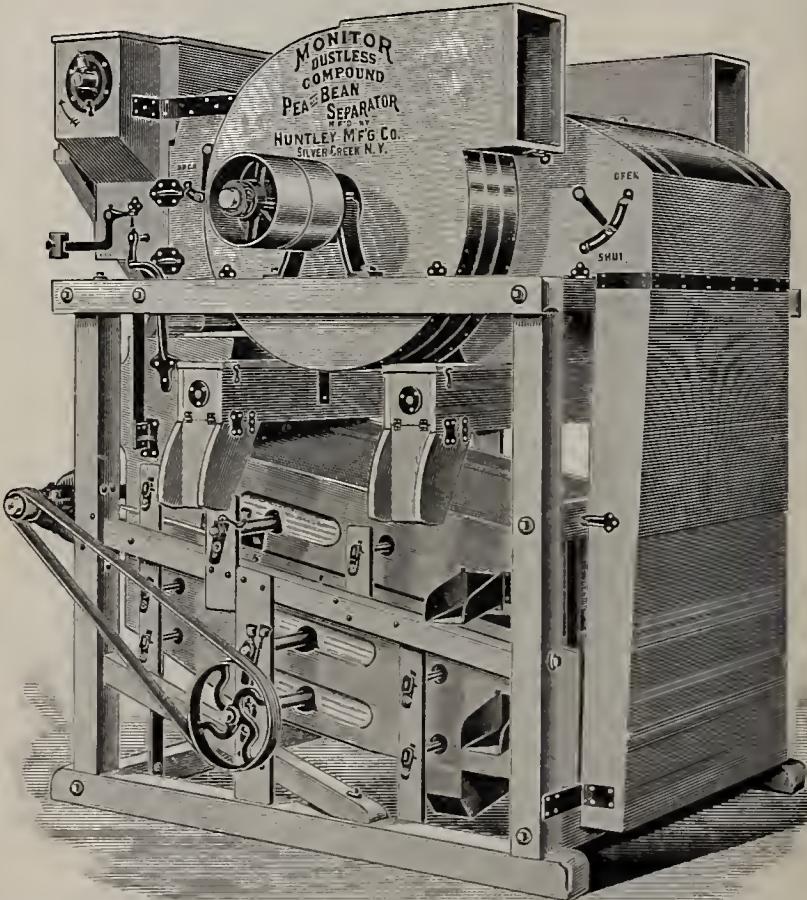
With the aid of the brush polisher, this machine will remove from 80% to 90% of all clay.

The brush polisher makes possible the reclaiming of beans that have become dirty from handling while damp.

Used as a receiving machine it will clean more beans per ratio of power required than any cleaner manufactured.

Will operate with the minimum of power, care and attention, doing the work for which it is intended in a thorough and economical manner.

Send for circular and list of users.



Huntley Mfg Co., Silver Creek, N.Y.

The World's Largest Manufacturers of High Class Grain and Seed Cleaning Machinery

The American Elevator and Grain Trade

A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

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No. 2.

AN OHIO CONCRETE ELEVATOR.

Our illustration shows a snug little concrete storage for a milling plant at Loudenville, Ohio, erected by the Macdonald Engineering Company, Chicago.

This building has a storage capacity of 60,000 bushels, divided into ten bins as follows: Four bins 12,000 bushels each; three bins 1,600 bushels each; one bin 5,600 bushels; one bin 1,000 bushels; one bin 600 bushels. The bins are all self-cleaning, and discharge through steel spouts directly to the foot of a double elevator leg in the basement. The elevator is arranged so that two independent streams of grain can be handled simultaneously.

All grain for storage in elevators is received in the mill and conveyed through a connecting gallery at a point about midway in the height of the bins. It is there discharged into an elevator leg, which raises it to the top of the cupola and reaches all of the bins by direct spouting. Simultaneously grain may be drawn from any of the storage bins and sent back to the mill for grinding purposes.

The building occupies a space 38 feet square on the ground and has a total height of 88 feet from the top of the foundation slab to the top of the cupola, the bins being 70 feet deep.

The contractors have used in this design their well-known standard plan of four nested cylinders, using the entire space and the outer pockets for storage. The exterior surface of the building does not suggest the cylindrical ideal, as the straight

wall, enclosing the outside pockets, obscures the cylinders, excepting on the corners of the building.

The lowest point in the basement excavation is 16 feet below the level of a lively little river, which passes in the immediate vicinity of the site. The water proposition was quite a difficult one, but it was finally overcome by a carefully constructed water-proof concrete vault; and when the foundation was completed it required but thirty days to complete the superstructure ready for the machinery. With the exception of the steel spouts, the double elevator leg and the conveyors, no other machinery was required for the installation. The building, however, is equipped with a counter-balanced man-lift and a steel stairway from the basement to the top of the bins.

All parts of the building are fireproof, the win-

dows being metal sash with wire glass and built to the underwriters' specifications.

Owners are rapidly perceiving the permanent advantage of storage of this kind and none who have investigated the advantages of concrete will consider anything else.

VELVET CHAFF BECOMES NORTHERN.

The Minnesota State Grain Inspection board met on August 9 to establish grades of grain for 1910-11.

[For the "American Elevator and Grain Trade."]

HUNGARY: THE WORLD'S GRANARY.

BY JULIAN KUNE.

Hungary was the undisputed possessor of the above title until some forty years ago it was wrested from it by the United States. It still occupies a prominent position among the grain-raising countries of the world. It is generally conceded that its wheat and flour are unexcelled. The Hungarian

flour is especially celebrated for its superior qualities.

Before proceeding further, a brief description of Hungary, its inhabitants, soil, and climatic conditions may aid our readers to understand more readily the great agricultural potentialities of Hungary.

During these days of easy intercommunication between various countries, Hungary may be said to be within hailing distance of our country; nevertheless, the lay of the land and the peculiarities of its people, as well as the soil and its mode of cultivation, offer sufficient materials for our closer study. It is but just and proper to state here that the statistics and figures in this article are official and were kindly furnished the writer by his esteemed countryman, Dr. Julius De Varga, Director of the Hungarian Central Statistical Office at Budapest, Hungary.

On examining the map of Europe, we find that the Kingdom of Hungary, which, by the way, is one of the oldest states in Europe, lies in its center. It

is bounded from the west, where the Danube, the father of European rivers, enters it, to the point where in the southeast it leaves the country, by the long chain of the Carpathian Mountains, which form a kind of huge semicircle all around Hungary. The boundary on the south is the lower Danube. All the mountains of Hungary are, however, not Carpathians, for on the west three branches of the Alps enter Hungary, one of which projects as far inward as to a point near Budapest. According to the census of 1909, the superficial area of the Hungarian Kingdom is 125,430,000 square miles. Its population, according to the same census, was 19,254,559. Today it probably exceeds twenty millions.

THE PANNONIA OF THE ROMANS.

During the Roman occupation of Hungary it was called Pannonia, although only that part of Hun-



NORTHWESTERN ELEVATOR & MILL COMPANY'S CONCRETE ELEVATOR, LOUDENVILLE, OHIO.
MacDonald Engineering Company, Chicago, Ill., Engineers and Contractors.

The only important change made in existing rules was the elimination of the velvet chaff grade. This and kindred varieties of the bearded wheats will now be graded in the Northern grades, not better than No. 2 Northern.

This action is based on a full and exhaustive investigation by chemical and baking tests, carried on for the last two years, the results of which are said to show such an improvement in the grain as to warrant, in the board's judgment, this action.

A wheat improvement special train will be run August 22d to September 7th over the Pennsylvania Lines in Indiana. The train will be equipped by the railroad company, while the lecturers, demonstration materials and literature will be furnished by the Purdue Experiment Station.

gary that extends along the right bank of the Danube was a Roman colony, the other parts remaining wild and unconquered.

Hungary is celebrated for its extensive lowlands (alfold). It is an enormous stretch of flat country with its surface 200 to 400 feet above the level of the sea. It occupies the central part of the country to the south, while on the northeast it reaches the Carpathian foothills. These lowlands, up to within three decades, were mostly pasture lands and famous as being the abiding place of the Hungarian cowboys (csikos). It was also famous for its treeless deserts (pusztas), where the Fata Morgana, or mirage, could be seen in its full glory. Now, however, all is changed. The pasture lands have been turned into rich farming lands, where all kinds of grain are abundantly cultivated. The deserts, or pusztas, as they are called, with the exception of the Hortobagy Puszta (immortalized by a popular song called, "A Hortobagy Pusztan fuy a szel," "On the Desert of Hortobagy blows the wind") have been turned into farms. This desert belongs to the municipality of Debretzen. A pusztta is in fact a

ans, Croatians and other races, which combined, do not exceed 2 per cent of the entire population.

THE MAGYAR AS A FARMER.

The Magyar, although very much attached to his native soil, cannot be classified as a natural born farmer. Centuries ago, after their incursion into Hungary, they led a nomadic life; later their chief occupation was to fight the Mongols and the Turks, which was not a very productive occupation. Their kings, perceiving this disinclination on the part of the Magyars to till the soil, imported Germans from Germany, Wallachians from Wallachia, Servians from Servia, and other nationalities, for the purpose of tilling the richest soil to be found in Europe. The Magyar for centuries looked upon farming as beneath his dignity; but when he saw how the foreign races around him were prospering by farming he gradually lost his dislike of it. More especially, after the feudal service was abolished during the Hungarian War of the Rebellion of 1848, did he show more enthusiasm and vigor in farming, and he has thus become eager to possess some land. Unfortunately, the major part of the land of his

about 100,000; of agricultural laborers, about 2,000,000; so that 33 per cent of the whole population is being supported by farming.

In order to show how unequally the land distribution in Hungary is, the following table may be of some interest: We quote from Dr. De Vargha, Director of Hungarian Statistics, as follows: In 1906, the whole territory of the Hungarian Kingdom was distributed as follows:

Description of land.	Area in Hectares.*	Per cent.
Ploughed land	13,531,028	41.63
Gardens	421,705	1.30
Meadows	3,349,806	10.31
Vineyards	234,182	0.72
Pastures	4,092,882	12.59
Forest land	9,060,888	27.88
Cane-brakes	75,042	0.23
Non-productive territory	1,734,261	5.34
Total	32,499,794	100

*A hectare square—2.471 acres.

The productive land is divided into 2,795,885 farms, as follows:

Of five acre farms, there are	1,459,893
Of five to 100 acres, there are	1,311,218
Of 100 to 1,000 acres, there are	20,797
Of 1,000 acres and over, there are	3,977

The last figures in the above list have but one meaning, and that is that they represent a holding of 31.19 per cent of all the productive land in the kingdom.

As an object lesson we will give a few of the large holdings of land: Count Palacinyi has a farm of 140,000 acres; Count Karolyi one of 110,000 acres; Count Ezterhazy one of 100,000 acres; Count Gorlitz one of 70,000 acres.

We could go on filling several pages with the description of holdings of 50,000 to 100,000 acres and over; but enough has been said to show that a very unhealthy state exists in Hungary as to the distribution of farming lands. We say unhealthy, because two extreme conditions are presented to us—one of 3,977 landowners possessing one-third, or 11,000,000 hectares of the total land, which in round numbers is about 33,000,000 hectares; while on the other hand, there are 1,459,893 farms whose size do not exceed five acres.

From whatever point of view we may look at it, Hungary is nevertheless a great agricultural country; and when the redistribution of her soil takes a more equitable turn, her productive capacity will be immensely increased. Even now she is in the front rank of grain-producing countries, not merely of Europe but of the whole world. Her crop prospects are watched and cahled to all the import and grain exchanges of the world, while the Budapest Grain Exchange is in importance second only to the exchanges of Chicago, Minneapolis and Duluth.

[TO BE CONTINUED.]

DEMONSTRATION FARMS.

Demonstration farms have been started in different parts of Minnesota by the division of agricultural extension of the University of Minnesota. These farms are under the direction of Prof. T. P. Cooper and have been established by the aid of a committee of three selected by the commercial club of the towns where they are located and three farmers in the neighborhood. The farmer whose farm is selected agrees to operate his farm for a term of five years as advised by the experts sent out by the division. He furnishes all equipment and labor and operates the farm as decided upon by agreement between himself and the demonstrator.

These demonstration farms must not be confused, as some newspapers seem to have done, with experiment farms. They are not intended for experimentation, but to show every farmer, or others interested in agriculture, what experimentation at St. Anthony Park and experience proves may be done on any farm in the state, where practical methods are followed.

Coffeyville, Kan., claims neighborhood interest in a field of oats that yields 145 bushels per acre and several that yields 95 bushels.



VILLAGE AND FARM SCENES IN RURAL HUNGARY.

Photographs by Felix J. Koch, Cincinnati.

treeless desert, very much like the deserts in Asia and Africa, only with this difference: while the African and Asiatic deserts have a sandy subsoil, the pusztas have a rich primitive soil of alluvial deposits, and with the aid of artesian wells for irrigation they are easily turned into productive farms. Many municipalities in Hungary are owners of vast stretches of land which is sublet in small parcels to tenants and where the cattle and pigs of the municipality are herded.

The soil all over the Hungarian Kingdom is very productive. Out of its sixty-five million acres of land, not more than possibly three million acres may be called as non-productive.

THE PEOPLE OF HUNGARY.

There are few countries where so many various races living alongside each other have retained for centuries their language and their distinctive habits and costumes as the people of Hungary. The ruling, or, rather, the most numerous of these races is the Magyar race. Its place of origin was around the Volga and at the foot of the Ural Mountains in Asia. The Magyars made their incursion into Hungary during the second half of the ninth century. Their present number in Hungary is a little over eight and a half millions. The balance of the twenty millions, which is the present population of Hungary, is made up, in the order named, of Wallachians, Germans, Slovaks, Servians, Ruthenians,

country is still possessed by a mere handful of his former feudal lords. The time, however, is not far distant when in Hungary and its neighboring states there will be a more equitable redistribution of the soil of the country, when every inhabitant willing to cultivate a modest farm, of say fifty to one hundred acres, shall be able to do so and make a comfortable living for himself and family, instead of drawing out a miserable existence, as he does now as a laborer, at starving wages for his former feudal lord. As it is now, there are in Hungary too many over large estates, or farms, and also too many of the so-called dwarf farms, consisting of five to ten acres of land each. As long as the present state of affairs shall exist, Hungarians will keep on emigrating to the United States as they do now, 168,000 emigrants from Hungary to this country being the record for 1909.

MAGYAR F FARMS.

In the Hungarian Kingdom there are between four and five million men and about two million women engaged in farming; so that seven million people are engaged in cultivating the soil. These seven million people support by their labor as many more who are dependent upon agriculture for their living. According to the last census, the number of land owners, tenants with their families, who assist in the cultivation of the soil, aggregates four millions. Of managers and their assistants there are

[For the "American Elevator and Grain Trade."]

A CALL TO DUTY.

BY EX-PRESIDENT MAURICE NIEZER.

The coming convention of the National Hay Association, to be held August 23, 24 and 25 at that beautiful place, "Cedar Point on Lake Erie," should be the best and most profitable convention in our history. The past year, I think, has been a profitable one for the hay shipper, as the market steadily advanced during the entire movement, and there was no excuse for the shipper to not make some money unless he sold short. The railroads have given the shipper good service the past year; and every element entering into the handling of hay profitably has favored the shipper. The "Hay Rate Case," which has consumed so much valuable time at our annual conventions for the past eight or ten years and created so much unnecessary dissension, has at last been settled, and we can now turn our attention to other matters of vital importance to the hay business, both for the shipper and the receiver.

I would especially urge upon the shipper to attend this convention, because my experience as a shipper for twenty years has proven to me that the shipper is the one who needs the National Hay Association the most; and I wish to impress upon all shippers who attend this convention that it is his duty as a member of the Association to take part in the proceedings of the convention, and if he has anything to say, "say it" in convention so that the Association and its members may receive the benefit. There are too many shippers who attend our conventions but do not take part in the discussions of the meetings. Every shipper should come prepared to take part in the meeting and give his views and ideas on all questions before the convention. If every shipper will take the interest in the Association that he should, the Association will continue to be a real benefit to the hay industry.

To my mind the most important question to the shipper is the grading of hay when buying from the farmer. Shippers as a rule are entirely too careless in grading hay when they buy from the farmers and also in loading it. Shippers cannot load No. 2 timothy and expect to get No. 1 timothy grade at the terminal markets. The shippers have always been prone to lay the blame for off grades on the terminal inspectors. Understand me, I do not wish to appear as making a defense of all terminal inspectors. I have investigated the inspection system in some of the terminal markets, which are supposed to be working under the regulation grades of the National Hay Association, and I find some markets that conscientiously try to adhere to National Hay Grades, and I find other terminal markets that disregard National Hay Grades altogether.

The shipper should acquaint himself with the different markets and ship his hay where they give him the best service and where he can get the best results; and if he knows that he has been mistreated in any of the markets that are supposed to be working under National Hay Inspection Rules, he should come to the convention prepared to expose that market; and if he knows what he is talking about, he will get a hearing and be doing the Association a benefit; and in this way the convention will be interesting to the shipper as well as the receiver.

Another important matter is the selecting of our annual officers. The men who as officers have guided the destinies of the National Hay Association from its inception have been men of high character and faithfulness to duty—men who have sacrificed both time and money to further the best interests of the Association; and its present high standing among commercial bodies of our country is the best testimony to the fidelity of the men who have been its officers. It is our duty, as members, to interest ourselves in the selection of officers who will guide the Association the coming year, and if you have anything to say,—and you should have,—say it. The nominating committee, whoever they may be, will be glad to receive your suggestions and if found meritorious will give them consideration.

Our Association is for all, but to make the motto effective all should take an interest in everything

of importance coming up at this convention and take part in its deliberations. Tell the convention of the conditions affecting the hay business in your territory, and if you have any suggestions that will be a benefit to the Association let the membership know what they are.

DEATH OF A. R. MCKINNEY.

The startling and regrettable news comes that during the morning hours of July 28, Dr. A. R. McKinney died suddenly while at work in his office at Alton, Ill., of apoplexy, in his 68th year.

Mr. McKinney, as the reader may remember, has been for many years secretary of the Millers' Mutual Fire Insurance Association of Illinois, a company that under his management has become one of the strong mutual companies of the West, the last annual statement showing total gross assets of \$1,724,662.31, and at January 1, 1910, \$15,707,353.96 of insurance in force.

Mr. McKinney was by birth a Pennsylvanian, his birthplace being Reedsville. In 1856 (when but thirteen years of age) he came to Illinois and



THE LATE DR. A. R. MCKINNEY.

was here educated for a physician, a profession he relinquished for the business of insurance. For about twenty-nine years he had been secretary of the Insurance Association named, with general offices at Alton; and that institution will be his best and most enduring monument.

Nevertheless, Dr. McKinney will be remembered for other things, especially by the people of Alton, among whom he lived for so many years. There he practiced medicine for some years before, nearly thirty years ago, he took charge of the insurance company named as its secretary and chief executive. As a citizen he took more than his share of the work of directing municipal affairs, although mainly as a private citizen, having refused on more than one occasion to become a candidate for mayor. He served, however, as city treasurer and also as a member of the school board.

His widow and two sons survive—Geo. A. and L. R. McKinney. The older son, Geo. A. McKinney, has been elected to succeed his father as secretary-treasurer of the Millers' Mutual Fire Insurance Association of Illinois.

TAKING OVER THE ELEVATORS.

Up to the end of July the Manitoba Elevator Commission had become the owner of but nine grain elevators, although petitions were on file with the Commission asking for the purchase or construction of houses at 200 places in the province. The nine houses are located at Gretna, Hartney, Swan Lake, Souris, Shoal Lake, Strathclair, Somerset and two at Hamiota. Besides these there are nine elevators in course of erection in as many different towns, while the number of sites under consideration is being added to daily accord-

ing as petitions are received from farmers who are either not served by elevators, or are dissatisfied with the private ownership of those in their district.

The Commissioners assert that fully half of the privately owned elevators in the province have been offered them for purchase at various estimated values, all of which offers are under consideration. Most of them, however, have been found too high and have either been refused or referred back for new offers. In this way the Commission is now carrying on negotiations with nearly all the line elevators in the province. The Commission, having inspected and valued every elevator in the province, does not wish to pay more for the goods than they figure they are worth.

It is further said that 75 per cent of the districts of the province have petitioned the Commission to take over the elevator business, and that it is only a question of time until the entire system is changed to public ownership.

[For the Illinois Grain Dealers' Association.]

SOIL IMPROVEMENT AND THE GRAIN DEALERS' RESPONSIBILITY.*

BY CYRIL G. HOPKINS.
University of Illinois.

THE INFLUENCE OF FERTILIZERS AND ROTATION.

I have the exact average yields of corn and oats for the six years, 1903 to 1908, from 90 farms in the heart of the Illinois corn belt—yields from measured land and from the scales. In 1908 these 90 farms included 7,455 acres of corn, 5,417 acres of oats, and 1,959 acres of meadow, pasture and lots. The average yields per acre of these 90 farms for the six years are 39.3 bushels of corn and 33.4 bushels of oats; and the average yields for the last three years are 36.6 bushels of corn and 28.2 bushels of oats. These are not estimates, but ascertained facts. The selection and care of seed, the preparation of the land, and the planting and care of the crops will average better on these 90 farms than on the average corn belt farm.

On one of these same farms the University of Illinois conducts an experimental field. The application of two elements of plant food, nitrogen and phosphorus, in dried blood and steamed bone meal, together with a small amount of lime, produced no increase in the 1902 crop, but increased the yield of corn in 1903 from 50 bushels to 69 bushels, a direct increase of 19 bushels per acre. The yield of oats in 1904 was increased by 14 bushels; the yield of wheat in 1905 by 16 bushels; and the yield of corn by 32 bushels in 1906 and 38 bushels in 1907. The yield of oats in 1908 was increased by 20 bushels and the yield of wheat by 8 bushels in 1909.

Here we have had exactly the same rotation and the same cultivation on both plots for eight years, but as an average of the last two corn crops the yield was 35.3 bushels on the untreated land and 70.4 bushels where plant food has been applied. These are facts, not theories; and they are in harmony with other facts secured during the past eight years from more than twenty soil experiment fields conducted by the University of Illinois in different parts of this state.

I ask you to accept two other Illinois facts: The plowed soil of an acre of the commonest prairie land of the Illinois corn belt does not contain enough nitrogen for 35 such crops of corn as we harvest for our best treated land, and not enough total phosphorus in the plowed soil, seven inches deep, for 55 such crops; and the subsoil is poorer than the surface for equal strata. These also are facts, and not theories.

ENGLISH STATION RESULTS.

In 1848, Sir John Lawes and Sir Henry Gilbert began an experiment in which a 4-year rotation has been practiced at Rothamsted, England, for 62 years, as follows: First year, turnips; second year, barley; third year, clover; fourth year, wheat.

If the clover crop failed in any year the bean crop has always been substituted, so that a legume crop has been grown every fourth year on these

*An address read before the Illinois Grain Dealers' Association at Decatur, June 8, 1910. Continued from the July number at page 12.

Rothamsted rotation fields. The soil is normal. The land has been measured, and all of the crops have been weighed. The work has been done in the most careful and practical way. What are the results? The yield of turnips on the unfertilized land has decreased from 10 tons per acre, in 1848, to about one-half ton per acre, as an average of the last twenty years. The yield of barley has decreased from 46 bushels per acre, in 1849, to 14 bushels, as an average of the last twenty years. The yield of clover has decreased from 2.8 tons per acre, in 1850, to one-half ton per acre, as an average of the last twenty years. Wheat grown once in four years has been the only crop worth raising on those fields during the last twenty years. The wheat comes after the clover, receives the full benefit of the stimulating action of the clover, and produced 21 bushels in 1907, and, as an average of the last twenty years, the yield has been 24 bushels, compared with 30 bushels in 1851, and with 32 bushels average for the first sixteen years; while the yield has been 38 bushels as an average of the last twenty years, where mineral plant food has been applied.

PENNSYLVANIA STATION RESULTS.

In 1882, the Pennsylvania Agricultural Experiment Station began a four-year crop rotation, including corn, oats, wheat and mixed clover and timothy. If we disregard the first three years, which were required to get the rotation and treatment fully under way, we still have the record of 24 years, 1885 to 1908. There are five plots in each of four different fields that have received no applications of plant food from the beginning. Thus, every year the crops are carefully harvested and weighed from 20 measured plots of ground that receive no treatment except the rotation of crops. The difference between the average of the first 12 years and the average of the second 12 years should represent the actual change in productive power during a period of 12 years. These averages show that the yield of corn has decreased from 41.7 bushels to 27.7 bushels; that the yield of oats has decreased from 36.7 bushels to 25.0 bushels; that the yield of wheat has decreased only from 13.3 bushels to 12.8 bushels; and that the yield of hay has decreased from 3070 pounds to 2180 pounds.

As an average of these 24 years, the addition of mineral plant food produced increases in crop yields above the unfertilized land as follows: Corn increased 45 per cent; oats increased 32 per cent; wheat increased 42 per cent; hay increased 77 per cent. As a general average of the four crops for the 24 years, the produce, where mineral plant food was applied, was 49 per cent above the yields of the unfertilized land, although the same rotation of crops was practiced in both cases.

EXPERIMENTS IN LOUISIANA.

In 1889 the Louisiana Experiment Station began an experiment on six plots of land of one acre each of much exhausted upland soil. Three acres have been left unfertilized, while the other three have been fertilized with phosphorus and with organic matter in the form of cotton seed, cotton seed meal, and a small amount of farm manure. A 3-year rotation has been practiced as follows: First year, cotton; second year, corn with cowpea catch crop; third year, oats, followed by cowpeas. By having three treated plots and three untreated every crop may be grown every year.

As an average of 19 years the yield of seed cotton has been 466 pounds on the unfertilized and 1,514 pounds on the fertilized land, the average yield of lint cotton thus having been increased from 155 pounds to 505 pounds per acre. The average yield of corn has been increased from 9 to 31 bushels, and of oats from 16 to 42 bushels per acre.

THE GRAIN DEALER'S INTEREST.

I have mentioned these various, long-continued rotation experiments only to call your attention to the fact that absolute information exists in great abundance for the proper guidance of Illinois farmers and landowners. If time permitted I could give you a thousand additional proofs of the value and positive need of returning plant food to the soil from which plant food is removed in crops. But the greatest need is for the dissemination of infor-

mation. This knowledge has no practical value except as it is applied. The grain dealer encourages and assists the farmer in depleting his soil and the grain dealer must also encourage, assist, and instruct the farmer in the matter of restoring needed fertility to his land.

The American farmer has learned well the *art* of agriculture in the hard school of experience, but the *science* of agriculture is still in its infancy and its application is almost unknown to him. If the corn belt farmers are ever to adopt systems of permanent agriculture, it must be done in the near future, or they too will awake to find their soils impoverished past the point of possible self-redemption; and we need to remember that the city is the first to feel the country's poverty. The boastful statement sometimes made to the effect that the American landowner has already become a scientific farmer is as erroneous as it is optimistic. Such statements are based upon selected examples or rare illustrations and not upon any adequate knowledge of general farm practice. In America the art of agriculture still consists in working the land for all that's in

many states besides those of the Southwest having made the experiment of raising the broom brush; and a total yield for the country of 100,000 tons is anticipated by the dealers, largely grown in Oklahoma, Illinois, New Mexico and Texas. San Antonio broom makers estimate from reports received that the broom corn crop along the Arkansas Pass Railroad alone will this year cover 2,000 acres, and reduce the price of brush from \$200 to approximately \$120 to \$150.

A NEW KENTUCKY ELEVATOR.

Our illustration is a picture of a new elevator at Mayfield, Ky., built for R. U. Kevil & Sons to take the place of their house burned last year. The contract for the new elevator was placed with the Burrell Engineering & Construction Co. of Chicago on March 7, and the work was commenced on March 15, the elevator being completed and in operation by July 1.

The capacity of the house is 40,000 bushels. It is built of reinforced concrete for the storage sec-



R. U. KEVIL & SONS' ELEVATOR AND MILL AT MAYFIELD, KY.

it—in working out of the soil by every expedient known to man the fertility which it contains. Even to this date almost every effort put forth by the mass of American farmers has resulted in decreasing the fertility of the soil.

Thus, tile drainage adds nothing to the soil but only permits the removal of more fertility in the larger crops produced. More thorough tillage, with our improved implements of cultivation, is merely working the soil for all that's in it. Better seed produces larger crops, but only at the expense of the soil. The rotation of crops acts upon the soil exactly as the rotation of the checkbook among the members of the family would upon the bank account. The ordinary manufactured acidulated commercial fertilizers, as commonly used in the East and South, serve in part as soil stimulants, and usually leave the land poorer and poorer year by year.

[TO BE CONTINUED.]

BROOM CORN.

The broom corn crop has moved very rapidly in the past six or eight years from central Illinois as the center of the industry westward into the Southwest, and today the city of Wichita handles probably one-half of the entire crop of the country.

The crop last year amounted to only 30,000 to 40,000 tons, and the brush sold as high as \$220 a ton, with an average of \$175 to the grower—the highest prices on record in this country. This year the crop will be a larger one by considerable,

tion, with a wooden working tower, and the walls are made waterproof by means of insulite.

The machinery equipment consists of a Richardson Automatic Scale, Monitor Cleaner, two stands of elevator legs and five screw conveyors. The grain is received from farmers wagons and distributed to the bins by means of screw conveyors. It is also taken by screw conveyors by way of the elevator to the mill.

Power to run the elevator is derived from the steam plant of the mill.

It is strictly a mill storage plant.

MAY BUY AHEAD.

The German authorities some weeks ago, on application made by the grain exchanges of Mannheim and Danzig, granted permission to those bodies to introduce non-speculative dealings for future delivery. The system introduced is the same as that allowed in Berlin, and will give the millers of the Rhine provinces and the west the same facilities as their Berlin colleagues enjoy of buying grain other than from absolute "hand to mouth" fashion. The permit extends to wheat, rye, oats, and maize, a minimum quantity being fixed in each case at 50 tons. To certain descriptions of wheat, however, the permission is not extended, *e. g.*, Fauh, Kabanka, Griess and Egyptian wheat.

Squirrels are charged with destroying large areas of growing wheat in parts of Utah.

[For the "American Elevator and Grain Trade."]
NOT LIABLE FOR DEATH IN GRAIN BIN.

BY J. L. ROSENBERGER.

Two boys of 15 years of age lost their lives in a grain bin of a mill connected with a distillery. A suit was brought to recover damages from the owners of the distillery for the death of one of the boys named Kisler, on the ground that the loss of his life was due to their negligence.

The proof for the plaintiff showed that on three or four occasions Kisler and his companions had been there playing about the distillery, and that on one occasion they went down into the bin to get their hats, which they had thrown in, and on another occasion two of them had gone into the bin to get some corn. But on both of these occasions, when the boys went down into the bin the corn did not come up over their ankles, and they came up without any difficulty. No warning was given the boys by the miller as to their being any danger in their going into the bin.

The proof also showed that on one occasion, about three weeks before the death of Kisler, some of these boys were there, and the miller had them sweeping out for him, and this sweeping was done on the third floor, as well as on the first floor. Kisler was there on that occasion. On still another occasion the miller had some of the boys sweeping up for him, including Kisler, and he gave the boy some corn in a sack for sweeping up. On another occasion Kisler was seen going away with a sack of corn, and, as this was the way the boys were paid for sweeping when they swept up for the miller it may be assumed that he had been there sweeping that day.

The plaintiff's case rested on the idea that the two boys, after they were seen at the mill widow, had gone up on the third floor and for some reason had jumped down into the bin; that a cake had formed, and when they jumped in they broke the crust and went down into the corn, which ran down over them and smothered them; one of the boys having gone through to the bottom, and the other having hung on the cross-rod as he went down, as one leg was on one side of it and one on the other.

The plaintiff insisted that the doctrine of what is known as the "turn-table cases" should be applied. But the difficulty was that while there was proof that a crust might form on corn, and that if the crust did form, and the bottom of the corn was then withdrawn through the hopper, the corn would run down when the crust was broken, there was no proof that this had ever occurred at the distillery, or that any one at any distillery or anywhere, had ever been hurt in this way, or that the managers of the distillery had any reason to anticipate that there was any danger in the corn bin. It was not shown that there was in fact any crust on the corn.

It was not shown the corn below had been drawn out, leaving a cavity beneath. No facts were shown which would charge the miller with notice that the bin was dangerous, and he was the only person who had any knowledge that the boys were ever on the floor, so far as the proof showed. The boys were trespassers upon the property. They had not been invited there, and why they went to the mill or what they were doing there, nobody knew. It might be surmised that they went there to play, or looking for a job from the miller, and, it might be possible that, finding nobody in the mill, they went up to the third story and for some reason went down into the bin. But no facts were shown which imposed upon the miller the duty of anticipating danger to the boys. The court is therefore of opinion that his allowing the boys about the mill, without warning them of danger from the bin, was not sufficient to impose on the defendant any liability.

This conclusion made it unnecessary for the court to consider the other questions urged by counsel as to the application of the rule in the turn-table cases to the facts shown here. The fact that boys 15 years old went into the bin to get their hats in the presence of the miller on one occasion, and to get some corn by his direction on another occasion, when it was safe to do so, did not charge him with notice that they would go into it on other occasions,

under different conditions, when trespassing on the property without his knowledge. *Kisler's Administrator vs. Kentucky Distilleries & Warehouse Co.*, 112 Southwestern Reporter, 913.

JUDSON W. PERRINE DEAD.

Many warm personal friends engaged in the grain and milling business in the United States and Canada will be pained to learn that Judson Wade Perrine of Rochester, N. Y., is dead. While at his son's home in that city he took cold, and developed what was diagnosed as appendicitis; and the physician in charge recommended an immediate operation in spite of his advanced years. With characteristic calmness and decision he consented and walked unaided to the operating room of the hospital. The operation was a failure, as he lived but a few hours after it was over and his children had reached him. Like a man setting out upon a journey to "a far country," he asked for his hat and coat then passed to his rest.

Mr. Perrine was of Huguenot ancestry, his paternal ancestors having been driven from France to America during the period of the great and for

ing a well-earned vacation with some special work for the company in England, Holland, Germany and France.

The death of Mrs. Perrine in April, 1905, was a severe blow to him; and this loss being followed a year later by a slight stroke of apoplexy, he thereupon retired from business (except that he represented the Huntley Company in 1907 at the Jamestown Exposition) and resided thereafter with his children, his home thus alternating between New York and Rochester until he died.

Mr. Perrine was a conspicuous member of the Masonic Fraternity, especially of the Blue Lodge of Master Masons, having been master of Warren Lodge, 147, of Union Springs for thirteen consecutive years. He was also a member of Hamilton Chapter, R. A. M., and Monroe Commandery, K. T., of Rochester. The funeral services, which took place at Rochester, after the address at the residence of his daughter, Mrs. C. H. Washburne, were conducted by the Masonic Order, by Genesee Falls Lodge of Rochester, at the special request of Warren Lodge of Union Springs. His four sons-in-law acted as the pall-bearers. Three daughters and a son, Wm. J. Perrine, of Rochester, survive him.

GRAIN ELEVATORS IN INDIA.

The Indian Wheat Elevator Committee, after many months' study of the subject, has made a report recommending that the use of grain elevators of the American type are needed for the storage of wheat in India, although it is not certain that the use of grain elevators would prevent rushes of grain from the Punjab to Kurrachee, as has been the rule in the past. There is, in fact, a sound commercial reason for these rushes immediately after the harvest (May, June and July). As soon as the wheat is ready for sale, early in May, the farmers need the money and further at that time, a season "between crops" in other exporting countries than India, the latter's wheat may be thrown on the market at a time when it is likely to command the best price. For the latter reason, therefore, the difficulty of spreading the business more or less evenly over the year is practically impossible without great risk of sacrifice of ability to sell in a satisfactory market; nevertheless the Committee believe that as the amount of grain increases in the future, substantial shipments will be made in other months, although, of course, the strong demand will be for wheat shipped in May, June and July.

The usefulness of grain elevators at Kurrachee will, therefore, not be in the way of equalizing shipments throughout the year so much as to increase the port's railway power to handle the rushes of grain that will be tendered, "and the cost of providing such an elevator would be a great deal less than that of any other works giving equal accommodation for discharging grain from railway wagons and loading into ships."

The Committee do not think the railway should be required to supply storage at the local stations, beyond accommodations for the grain that may be forwarded within one week's time. This accommodation should be such as will make it possible to keep the grain dry in case of rains. Further accommodation should not be required, even though the owner should be prepared to pay for it, because it falls upon the owner to provide his own storage beyond the week's forwarding.

The Committee seem to approve the Minnesota and Manitoba laws requiring some system for control of cars, on behalf of the numerous owners desiring to move their grain simultaneously. "Priority registry" is the local term used; and thus far, say the Committee, it has availed to give substantial equality of treatment to all, and its continuance is advised.

Further, the Committee think the railway should keep its traffic facilities up to the requirements of the wheat export trade to Kurrachee; and for that purpose would advise adding to the cars to be provided a type of wagon that could be used for handling bulk wheat, in case of a decision by shippers and the railway to carry wheat in bulk from the hills to Kurrachee.



THE LATE JUDSON W. PERRINE.

France disastrous persecution of that sect. Mr. Perrine was born on September 14, 1834, on a farm near West Sparta, N. Y. When a young man he became a miller, learning the trade under Isaac Thomas at Union Springs. He worked as an operative miller and as proprietor for many years at Union Springs, where in 1856 he married his wife, *née* Maria A. Fowler, and also for brief periods in Canoga and New York City, returning to Union Springs in 1881, when he retired from the milling business and removed to Rochester.

About this time he became a machinery salesman, and for several years traveled in the United States and Canada introducing to the milling trade especially the new machines then coming one after another in rapid succession. He is said to have been the first traveling salesman of the steel rolls that have since practically supplanted the burr stone for the milling of grain. His first engagement of this nature was with the Throop Grain Cleaner Co. of Buffalo, from which establishment he went to Aug. Heine of Silver Creek and then to the Huntley Manufacturing Company of the same city, which company he represented for sixteen years in New York City as eastern agent. During this latter period he devised several improvements which were adopted by the Huntley Company for use on their grain cleaning, and particularly on coffee cleaning, machines.

As a salesman he was unusually successful. His pleasing and sympathetic manner, coupled with technical skill and experience, both as a miller and handler of grain cleaning machinery, giving him peculiar facility for presenting the merits of the lines of machinery he handled. Recognizing this ability, the Huntley Company in 1903 sent him to Europe, where he spent some ten months, combin-

A CANTILEVER GRAIN ELEVATOR.*

Some important advantages are claimed for a new type of floating elevator designed by Alfred Mitchell, engineer of the London Grain Elevator Company, Ltd., for its use. The elevator is employed for discharging grain from ships to lighters, and is designed to work alongside of or end-on to the ship. When working in the latter position it can deliver grain to two barges at the same time. The condi-

bars and lever, as shown. The grain is discharged from the elevator head by adjustable chutes onto an endless conveyor belt carried on the inside of the jib. This belt is of canvas with rubber on one side, and is provided with diagonal ribs on the side which carries the grain to facilitate the grain being lifted directly up when the jib is lowered to its extreme position. These ribs are placed diagonally to allow them to run freely over the supporting rolls which carry the slack side of the belt. At the top of the

than the speculative trade, it is somewhat axiomatic with them that a prospective bumper harvest is always over-estimated and a short crop under-estimated. This is the usual error chargeable to the natural human tendency to exaggerate the actual.—Market Record.

MORE ELEVATOR LEGISLATION.

During an extended tour in the Canadian West in July, Sir Wilfrid Laurier, the Canadian premier, several times, in as many ways, assured the grain growers of the West, in response to petitions presented at several places on the tour, that the matter of government operation of terminal elevators would be brought up at the session of Parliament opening in November next. He stated that the situation "demands and shall receive immediate investigation."

At Lanigan, Sask., on July 25 he said, on the subject of the terminal elevators:

This subject is not new to me. For some years the complaints of the growers of wheat have been laid before the government at Ottawa, and I think these complaints have not been unheeded. We passed the grain act a few years ago, and, unless I am greatly mistaken, that act has proved a very great benefit to the growers of wheat. But it has happened that the act, good as it is, has not been able to cure all the evils of which the farmers have to complain. The evil of which the farmers complain at the present time is the mixing of the grain at the terminal elevators. I understand there is not much complaint of grain being mixed at the Canadian Pacific elevators. The mixing of grain has not taken place at the Canadian Pacific elevators for the reason that they are not in the position of those who buy and elevate wheat. To those who handle wheat and buy and elevate it, there is an incentive to mix the grain; whereas the Railway Company, which is the shipper of the grain, has no incentive to mix the grain. What do we conclude from this? The conclusion we have arrived at is that it is against the public interest that buying and elevating should be in the same hands. Therefore, I think we shall provide a remedy, if we have legislation, whereby we make that impossible.

At another place, speaking to the same subject, he said:

I have given sufficient attention to this question



FIG. 3.—UNLOADING AND BAGGING GRAIN WITH A MITCHELL ELEVATOR.

tions of taking grain from ocean-going steamers vary considerably as regards the size of steamer and the position and manner in which the grain is stored. When discharging is commenced the grain is probably at a height of fifteen or twenty feet above the water line. When the ship is entirely discharged it is necessary to lift the bottom of the elevator over the highest point of the coamings, which may be 40 feet above the water line. Thus the lower or digging end of the elevator must have a vertical range of some 60 feet, and the clear length of the leg below the supporting arm must be sufficient to reach the bottom of the deepest hold of any ship, which may be forty feet for a moderate sized steamer and considerably more for one of the ocean liners. The width of the ship is also another important factor. The majority of ships are divided by longitudinal bulkheads, and in the afterhold by a tunnel over the propeller shaft. It is, therefore, important that the elevator should be easily able to work on either side of the ship's center line.

In order to meet all exigencies of the Thames service, the company's engineer devised the apparatus shown in the engravings. Fig. 1 shows the elevator completely extended to its maximum range, Fig. 2 illustrates the leg in its raised position; while Fig. 3 shows the cargo of a steamer being discharged into bags. The leg can be telescoped, and has a clear length, when extended, of forty-one feet under the suspending pin. The buckets are carried upon an endless chain and are so arranged that as the leg is lifted the exact amount of chain that is let out on the front of the leg is taken up in the back, so that the chain remains of the same length and of even tension throughout. The buckets are spaced $10\frac{1}{2}$ inches apart, have a capacity of 100 tons of wheat per hour at full speed, and deliver at the rate of 320 buckets per minute. The elevator is carried at the end of a cantilever jib 25 feet long, center to center and nine feet six inches at the back end. The weight of the leg is partly balanced by the balance weight at the back connected by parallel

post this belt discharges into a second receiver which discharges through the long telescopic chute into a boot of a second elevator which is placed on the deck. This in turn raises the grain and discharges it into the weighing house or hopper, from which it is delivered to the craft.

The elevator jib is carried at the top of the inclined post, which in turn is supported by the trunnion pin at the top of the frame which rotates upon the turntable, whose supporting ring and rack are secured to the bottom of the craft. The length of the tilting post above the trunnion is thirty feet, and the height of the trunnion pin above the bottom of the barge is seventeen feet three inches. The weighing house is provided with six Avery's patented automatic grain scales of 250-lb. capacity each, which can discharge into sacks, as shown in Fig. 3, or in bulk into craft as required. It is stated that the time required for putting the machine into a ship is about four minutes as compared with the time required to ship and unship the portable machine previously employed, which was from two to four hours.

All the controlling motions are performed by series 4-hp. motors, and the driving of the elevator is done by a 20-hp. motor attached to the turntable. Direct current is generated on board by a suction gas engine, belt connected to a 110-volt dynamo. The deck elevator is driven by a countershaft in the engine room and a chain belt.

Some much larger machines than the one described are being constructed at the present time which are provided with additional means of delivering grain ashore as well as to craft by means of a portable conveyor belt and telescopic chute. The elevator is driven in this case by a motor attached directly to its head, thus doing away with all gearing. The grain is also delivered by means of chutes fixed inside the post and discharged by swiveling chutes into the second elevator, which is also driven by a direct-connected motor. The whole apparatus is controlled by one man, located in a cab on the turntable.

Among veterans of the grain trade, especially those who are more closely allied with the cash



FIG. 2.—MITCHELL ELEVATOR WITH LEG RAISED.

to be able to say that the situation which prevails at the terminal elevators at the head of Lake Superior shows the need of reform. The present situation has led undoubtedly to this, that the men who control the elevators have been able to mix grain to the detriment of the producers of grain.

*From the Engineer, London, reprinted in America by "The Iron Age," to whose courtesy the present publishers are indebted for the use of the plates of the accompanying engravings. The text is here somewhat cut.

Already we have fined a few of these men. Already our attention has been directed to the mal-practices, and we have checked them; but what we have done is not sufficient. It is not sufficient to punish the guilty parties. What we ought to do, and what we shall do, is to make it impossible that there shall be any mixing of grain at the terminal elevators. This is what you have for your object. The remedy you suggest is that the government should own all the elevators. I am not very much in favor of government ownership of

[By Permission.]
THE MORAL STANDARDS OF THE GRAIN EXCHANGES.*

BY GEO. A. WELLS.

During the past few years the public has demanded an uplifting of the moral standards of the individual and of society in every form; and such public sentiment has been particularly concerned in

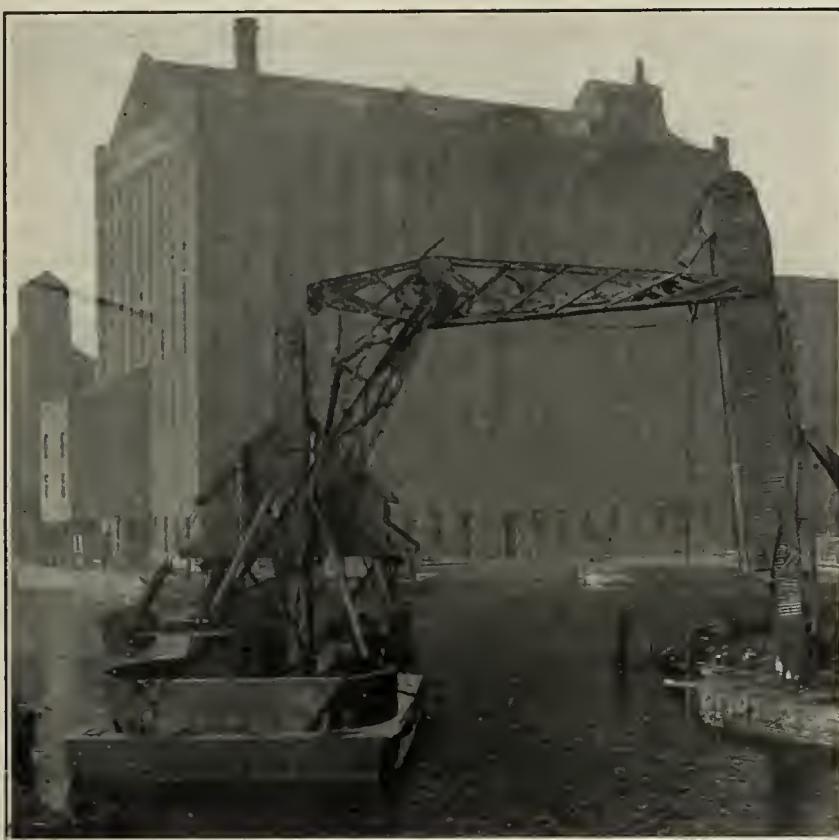


FIG. 1.—MITCHELL CANTILEVER FLOATING GRAIN ELEVATOR.

utilities, but in this case I see no very serious objection to the ownership of the elevators at terminal points, if that be the only remedy available. Although I cannot make any announcement, I will say that I shall have the matter investigated and I shall ask the delegates of the grain growers of the West to come to Ottawa and give us the benefit of their information as to what investigation is necessary to cure the evil from which you are suffering.

MONTREAL BLOCKADED.

The flood of old wheat down from head of the lakes to Montreal, and the slow export demand, has fairly blockaded that port, so that during July a temporary elevator embargo was on, the existing houses being unable to take care of the retail grain arriving.

Although prices on this side have been out of line for an export trade, shipping conditions are against an export movement. "At this time (July)," said a leading Montreal exporter, "there are many tramp steamers that would be glad of the opportunity to ship grain, but instead of this privilege being given them, they are debarred from the trade by the insurance conditions, and meanwhile people are losing money because they cannot get their grain moved until such times as the schedule steamers can accommodate them."

The crush has been such that the Harbor Commissioner has reduced the term of free storage (20 days) with hope of stopping some of the flood of grain.

It is reported from Manhattan, Kan., that experiment in the production of a variety of corn that will resist drought are being conducted by the botanical department of the State Agricultural College there. Crosses are to be made between many varieties of dry-country corn with the Chinese corn obtained from the United States Department of Agriculture, a description of which appeared in these columns some months ago. This Asiatic corn is said to have unusual drought resisting qualities, but the grain is inferior, and an effort will be made to produce a species which will have the grain size of the western variety and the hardiness of the Chinese.

correcting abuses that have existed in commercial organizations, and especially directed against combinations in restraint of trade and unjust discrimination by public service corporations.

The boards of trade and grain exchanges are coming to be recognized as public institutions, conducted for the public good and not merely for the private gain of the individual membership. Such institutions reflect the character of the membership, and if the individual members fail to recognize the necessity of maintaining the highest standards of morality and justice, the public will unquestionably insist upon such governmental supervision as will establish such standards.

The rules and regulations of the grain exchanges should be formulated to stand public discussion and criticism, and should be supported by the membership in a candid spirit of honesty.

It is quite natural that men having identical interest and composing an organization of any kind should formulate rules and customs tending to benefit their own particular interests. Men are prone to recognize their own selfishness and often set forth propositions which they insist are just, equitable and generous, when, in fact, they are unjust and selfish. Such men are not honest with themselves or the public.

The moral standards of the grain exchanges of this country are on a much higher plane than they were ten years ago. It is unnecessary to recite the abuses and dishonest methods that existed in those days, that have been largely eliminated. Many of those things were absolutely wrong and could not stand the first ray of limelight; consequently they were abolished or improved. Today the questions that arise are not so clearly in the wrong. There are two sides to most of them, and consequently discussion is necessary in order to effect an adjustment that will be satisfactory to all parties concerned.

Grain exchanges we believe to be quasi-public institutions, and any rules or regulations affecting the public and the patrons of their individual member-

ship should be equitable and just. The grain trade as a whole should promulgate its own laws in such an equitable manner that there may be no need of legislative enactments and statutes.

Senator Beveridge, in his address at the grain dealers' national convention at Indianapolis last October, said:

There has been a great deal of talk in the last few years, especially among business men, about the reform legislation which Congress has enacted. If business men themselves had cut out those evils, legislation to cut them out would not have been demanded or passed.

It is not within the power of any man, however able, however powerful, however rich, or however resourceful—it is not within the power of any body of men, to prevent legislation that is needed by the people merely by opposing it. The only way that any such legislation can be prevented is by yourselves wiping out the evils which that legislation would be meant to correct.

The only way in the world that you can solve that problem is by one of two methods: first, by organization; second, by putting morals into your organization.

The truth about it is that the modern business man who reads and thinks is coming to find out this profound simple truth, that morals are more of a business asset than the commodity in which you deal.

You must take public opinion into account in your balance sheets as much as you take your mills or your railroads or any other asset that you put down in dollars and cents. You are dealing with a mighty public that reads, that thinks, that is closely knit together. The American people are now a family; and whenever a business becomes so big that it affects all these people, the opinion of all these people as to how that business is conducted becomes an element of the safe conduct of the business itself.

The thing in Blackstone that impressed me most profoundly—that startled me in fact—is this great sentence, right in the beginning of that work wherein the great jurist, in his greatest lecture, says at the beginning of his book—"Remember that no law of man is in the end a law at all that is not also a law of God." You can not beat the game of eternal verities. No law upon our statute books will last or work welfare to you that are not based on that.

The public are giving some attention to the abuse of speculation in the grain exchanges, and legislation is proposed that as yet promises to deal with the question in a very crude manner. The general public is not yet well informed of the proper function of "future contracts" and "speculation" in our system of distribution of grain products, and it is possible that the first legislative experiment will be a mistake, especially if the right of making future contracts to buy or sell is interfered with, and also if the legitimate speculative investor, who assumes the risk of ownership, bridging the chasm, as it were, between the producer and the consumer, is prohibited from making such investments.

Speculation is an essential factor in the development of the country and its commerce, and without it little progress would be made in our civilization. The gold mines would never be opened, manufacturing would be confined to narrow limits, and the farmer with a few bushels of wheat for sale would be obliged to wait the pleasure and need of the consumer before he could find a buyer, and the question of the value of the grain would be an everlasting mystery.

The commercial distribution of grain as conducted through the medium of the grain exchange is one of the wonders of this age, and, considered in connection with modern facilities of transportation, the exchange provides such convenience that the farmer may at all times have an open market and an established market value for his grain, with full knowledge of such values as are fixed by the laws of supply and demand.

But there are abuses that have been tolerated too long by the grain exchanges. They should get busy and eliminate the opportunities to manipulate corners that result in the establishment of abnormal values and also eliminate so far as possible the gambling spirit in speculative transactions. We are of the opinion that a commission firm who sends out traveling solicitors to call on country grain dealers, bankers, merchants and preachers to induce them to "buy or sell" options is not living up to the moral standard that should be established by the grain exchanges, and that such firms are not entitled to

*A paper by the author, Secretary of the Western Grain Dealers' Association, read at the annual meeting of the Texas Grain Dealers' Association, held at Fort Worth, Texas, May 26 and 27, 1910.

consideration as good members of society, or citizenship, and that such business should be tabooed and eliminated by the grain exchanges.

The constitutions and by-laws of the grain exchanges uphold the highest moral principles in relation to contractual obligations and a member who does not live up to those principles is promptly called to give an account of his conduct. Would it not be well for the grain exchanges to broaden the scope of the application of such moral principles



THE NORTHWESTERN MALT AND GRAIN CO.'S ENVIRONMENT.

and apply them to the abuses of the manipulation of values and the gambling spirit?

MORE ABOUT BUCKET SHOPS.

On July 14 Louis A. Cella of St. Louis was put under arrest in New York by a United States marshal on a charge of perjury, the principal complaining witness being Henry Altemus of Georgetown, O., formerly president of the Standard Stock and Grain Dealers of Jersey City, who was employed by the Cella Commission Companies of St. Louis and Jersey City. Altemus, who is named jointly in the Washington indictment with the Cella brothers and Adler, turned state's evidence, and after describing the conduct of the business testified that Cella sent messages daily over the wire of the Standard concern to his brother Angelo. Altemus revealed the cipher code also which he alleged had been used by the Cella brothers in telegraphing figures. No sooner had Altemus concluded his testimony than Cella was arrested on complaint of George Scarborough, the special agent of the department of justice in the bucket shop cases, charging that Cella, while a witness, falsely testified that he never was interested in the brokerage concern known as the Standard Stock and Grain Dealers of Jersey City; that he never directed its affairs or derived any financial returns as a result of the business. On his arraignment Cella's bail was fixed at \$5,000, which he furnished and was released. He already is under bonds in the bucket shop case.

On the same day Judge Hand in New York signed warrants for the extradition to Washington City of Edward S. Boggs, Richard E. Preusser, Leo Mayer, Robert A. Guy and Oliver J. Robinson, members of the firm of Edward S. Boggs & Co. of New York. All were placed under \$5,000 bonds each to appear for trial in Washington on October 1.

On the same day at Boston Arthur B. Sederquist, Harry F. Curtis and John E. Barry of the defunct firm of Sederquist, Barry & Co. of New York and Boston, pleaded not guilty to three secret indictments in the Superior Criminal Court. The three indictments charge larceny in 120 counts of \$500,000, the maintenance of bucket shops and conspiracy to steal. They were held in \$20,000 bonds each for hearing in October.

On July 27 E. W. Northrop & Co. of Racine, Wis., quit with liabilities estimated at \$30,000. The firm traded through the Hammond Elevator Co. when the firm's clients met with heavy losses because of breaks in the stock market and they made a call on clients for margins due, there was little, if any, response and the suspension followed.

SOYA BEAN IN WEST AFRICA.

In a recent address to the African Trade Section of the Liverpool Chamber of Commerce Mr. A. Granville Turner gave some data respecting the cultivation of the soya bean in British West Africa, for the promotion of which he was especially employed by the West African Agricultural Department. He said the bean could be cultivated in all the colonies with phenomenal results, the plants reaching maturity in six, eight and ten weeks, the land yielding besides two more crops a year. The per cent of oil runs from 19.62 per cent in southern Nigeria to 23.20 per cent in Sierra Leone, whereas English importations of Manchurian beans gave only 15 per cent of oil. Moreover, he had found that new and improved breeds of beans could be obtained in West Africa in about 14 months (possibly), while in Manchuria it would take seven years (probably). If desired to grow the beans only on a given piece of land, favorable conditions would give six crops a year.

MALT HOUSE FIRE.

One of the most serious fires Chicago has seen for many months took place on July 24, when the grain elevator of the Northwestern Malt and Grain Co. and the brewery and stables of Chas. F. Ogren & Co., together with many private business buildings, flats, etc., in the northwestern part of the city were destroyed. The total loss was about \$300,000; and several persons were injured, including a woman who was fatally burned.

The fire originated in the cupola of the grain elevator of the Northwestern Malt and Grain Co., and as the day was one of intense heat and all materials were dried to tinder by the drought, the fire was a most difficult one to fight. The elevator was an old style wooden structure, seven stories high,

is believed that if the salvage works out as is expected the loss on grain will be about 30 per cent. The company has about completed a concrete and steel elevator and malt house on adjacent plots of land.

[For the "American Elevator and Grain Trade."] AN INQUIRY INTO THE RAILWAY PROBLEM

BY L. C. BREED.

The United States affords the widest domain on this earth wherein absolutely free and unrestricted trade exists. This being the case, the American transportation system should command the interest and the careful study of every merchant and manufacturer. We hear a good deal in these days about publicity, and this is well; but it is proper to realize that each business man is one of the units, or factors, which go to make up this great force, and consequently a positive responsibility rests upon each citizen to contribute his influence in support of measures calculated to promote the common weal (in which, of course, he shares) and to exert himself to defeat attempts to introduce radical railroad regulation by parties who are either unfamiliar with the problem or seeking to exploit selfish ends.

Notwithstanding nearly a century has elapsed since steam railroad transportation was inaugurated, and that from an insignificant start the country has become widely penetrated by the various systems, something long has been, is, and apparently will continue to be, wrong in the relations between the people and those engaged in the transportation business. Drastic remedies spasmodically applied—boomerang laws to force competition and prevent combination, commissions overloaded with inefficiency, ill-considered and misapplied rate laws—have not reached, but have rather more deeply rooted, the essential wrong.

From the records we may learn that the capital invested in transportation is about one-sixth of all the wealth of this country and that about one-twelfth of all our people depend for their livelihood on the wages paid by transportation corporations. It also appears that practically all the railways in the United States have consolidated into a few systems, which systems are themselves united by community of interest, and that the human heads of



RUINS OF THE NORTHWESTERN MALT AND GRAIN CO.'S GRAIN ELEVATOR, CHICAGO.

with a 20-ft. Texas. The cause of the fire is not known. The lower part of the building burned only slowly as the grain poured out of the breaks in the walls, and in consequence a large salvage of grain is expected, estimated at \$100,000. The loss to the Malt and Grain Company is put between \$150,000 and \$200,000. The Pittsburg Malt Co. claims a loss of \$25,000 on malt in store. The property was all insured.

The Northwestern Company has entered into a contract with the insurance companies to dry and handle the salvage grain at 10 cents a bushel and store it in its new elevator without charge and to sell it at a commission of 1 1/2 cents a bushel. It

these systems hold and control some seventeen thousand million dollars of the people's savings.

It is claimed that our transportation system, as a whole, is grossly over-capitalized; that for many of the securities which represent the value of the system, no money was ever paid into its treasury; and that over-capitalization serves as an excuse for exorbitant rates. Furthermore, that fictitious securities are still being issued. It is also asserted that the profit-making burden of the entire transportation system is thrown upon the parts of the country least able to bear it; that is, the non-competitive and non-junction points.

The vast importance of this phase of modern civ-

ilization may be grasped by realizing the fact that the increase in transportation facilities, invested capital and number of employers will be, at least, in direct proportion to the increase in population and will probably exceed it. Doubtless it is reasonable to expect that in twenty-five years more there will be invested in railways in the United States from forty to fifty billions of dollars, with voting employees of four to five million. There is a growing demand to be noted, that the complete organization resulting from railway consolidations and railway growth be eliminated as a political factor, or the country may be endangered because of its undue influence.

To enter the discussion of the railway problem more in detail, it is proper, first, to consider the adequacy of the existing system. This on high authority is claimed to have but two-thirds the capacity required of it by the needs of the country under normal conditions of crops and business. Secondly, in the matter of expeditious service, it has been stated by the Interstate Commerce Commission that in this respect, as regards the transportation of freight, the system is inadequate; a very significant fact in this connection is the small average mileage made by cars in freight service, amounting to only twenty-three miles a day. This is owing to light road-beds and usually (considering the weight of the equipment) light rails; and the carriers cannot afford to move fast, and carry freight at the low average of seven and one-half mills per ton per mile.

In order to have an adequate transportation system, road-beds must be made more secure—more permanent. There are tens of thousands of miles of American railways that are either not ballasted at all, or so imperfectly as not to deserve the name; and all bridges must be made of stone, concrete or steel. Trackage must be enormously increased and wherever the business is such as to even moderately warrant it, the roads must be doubled-tracked. Doubling the trackage of a road quadruples its capacity. In Great Britain all roads are double-tracked. In the United States in 1907, of the 224,382 miles of main track, there were less than 20,000 miles of double track. In Great Britain no two roads cross each other on the same grade. In this country practically all roads cross each other on the same grade. Here are causes of loss in running time and the occasion of collisions. The equipment ought to be sufficient to meet requirements at any and all times, even though this involves periods of idleness for a considerable percentage of it, and, above all things, the ability to handle all productions at the opportune time is essential.

Finally, the facilities for handling freight in yards and terminal trackage should be increased at important centers. This feature of railroad affairs has, in years past, been neglected to an extent that rendered all the other means of good service largely inoperative.

Those persons who have given the subject of railroad economy the principal attention have been college professors, legislators and judges, and these parties have had, or seem to have had, but two viewpoints, that of the managers and that of the shippers; and, consequently, have, so to speak, looked at but two sets of books—the books of the system and the books of the shippers. They have concerned themselves almost wholly with the cost of service to the transportation companies, and whether the rates charged shippers were reasonable; while as a matter of fact, under the plan which has been in vogue, the first of these matters is comparatively unimportant, and the second not possible to decide. The cost of a particular service to the carrier has never been the determining element in fixing the rates it has charged, and as to whether rates are in themselves reasonable, there is no basis or data provided for the determination of that question.

The viewpoint of investors and that of the interested public contemplates fixing upon the cost, loss and waste which our transportation system has entailed, is entailing and will continue to entail upon the country as a whole, and it will be found that this mismanagement is a very serious matter to both these great classes.

PROPOSED STANDARD ELEVATOR.

One of the problems before the Manitoba Elevator Commission, in the course of their effort to handle the farmers' grain after eliminating the grain buyer on private account is, as the Commission say, "to supply the best means of handling the producers' grain from the wagon to the market; in other words, to produce an elevator which shall embody such facilities as are necessary in order to make the system meet the requirements of the producers, and at the same time keep within the limits of reasonable cost."

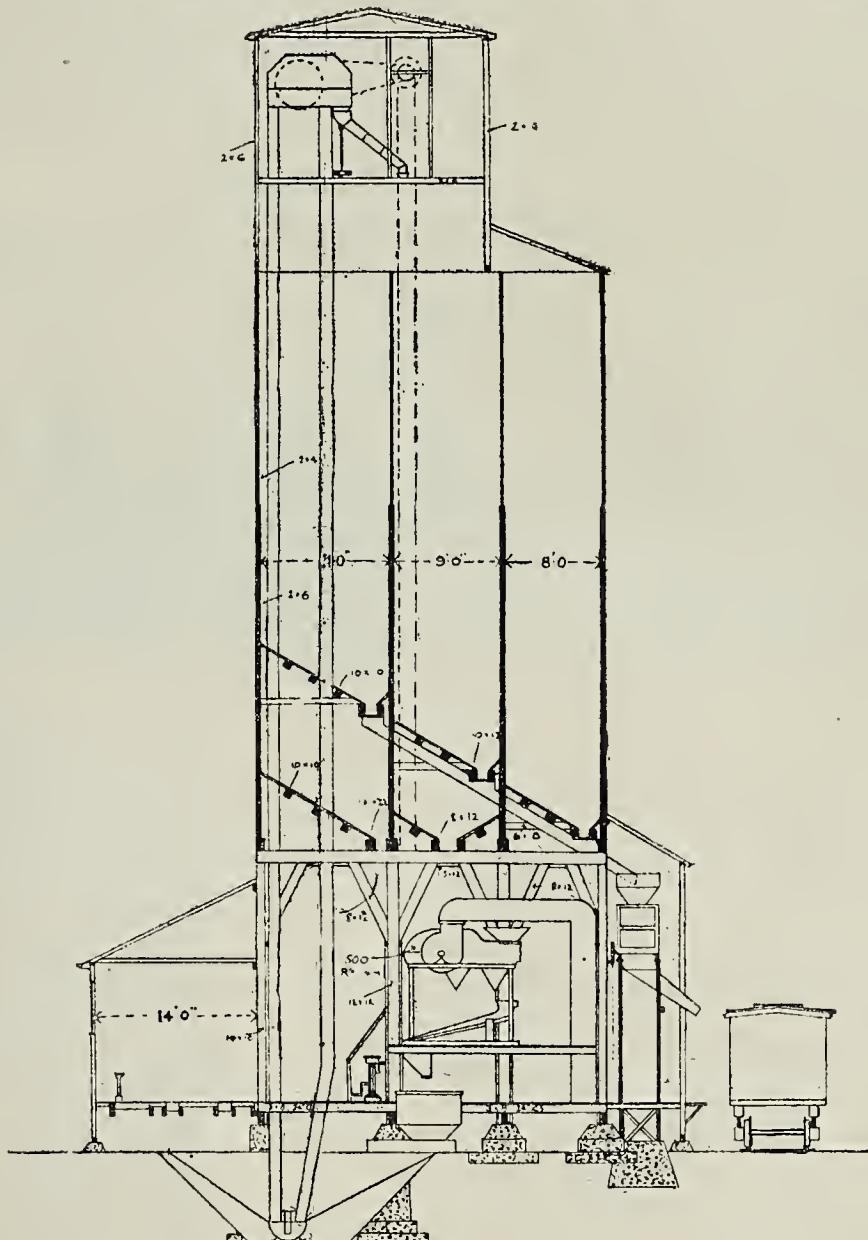
The Commission has, therefore, adopted, at least tentatively, as a working model, an elevator for country stations, that shall have two sinks, or receiving pits, each to be provided with scale and dump, this duplication of the dump being necessary where two or more thrashers are at work in

shall faithfully record every pound of grain leaving the elevator.

Another feature of the plan is the fact that the type elevator may be extended to meet any desired capacity. The plan described is that for a minimum of 30,000 bushels, but it admits of extension to 60,000 or 75,000 bushels without any additional machinery; or it may be divested of one-half of its machinery and power and be made to serve at a much reduced cost a locality which does not call for such rapid handling.

To facilitate the rapid loading of cars, a car-puller is provided with power to handle ten cars; and an attachment is also provided for assisting over-laden teams when drawing up the driveway. The arrangement of legs makes it possible to keep the driveway near the ground; in fact, a rise of four feet is all that is necessary.

The space below the sloping bottom of bins is



THE MANITOBA ELEVATOR COMMISSION'S STANDARD GRAIN ELEVATOR.

the same neighborhood, in order to avoid delaying the farmers at that time.

The house plan contemplates a cleaner of 4,000 bus. capacity per hour to deliver the wheat after cleaning into the farmers' own bins; or, if so desired, the grain may be passed without cleaning into the bin or car direct.

The special feature of this plan is that the bins shall all be car-load size; and that once the grain is passed into the bin its only way out is through the automatic weigher directly to the car, without any further elevating. This method would prevent any possibility of mixing or scattering of grain into other parts of the elevator. The bins are to be all steel lined, so that there will be no chance of grain being left in the bin bottom. A well-constructed turn-head will be used to deliver grain into the bins.

The elevator is, therefore, practically divided up into shipping bins, so that the identity of the shipment is absolutely preserved. There will be three checks upon the weights—first at the wagon, second after cleaning, a third at the automatic scale interposed between the spout and the car, which

utilized by supplying storage for street buyers who may require accommodation in the elevator, and whose methods do not require special binning. In order to make the final weighing-out accurate and reliable, the automatic weigher is placed upon an independent foundation, and not connected with the elevator in any way.

These plans were prepared by E. Senior Eslin, grain elevator engineer; and the construction of the first house on this plan began at Dufresne on the C. N. Ry. in July. The estimated cost is not given.

The highest price ever paid in Walla Walla for new wheat was recorded on July 26 when Dement Brothers, flour millers, paid William Struthers 90 cents a bushel for 18,000 bushels of new crop blue stem.

Only two states have a greater corn acreage than Texas this year: Illinois at the top, with an acreage of 10,609,000; Iowa second, with 9,476,000, while the acreage of Texas is estimated to be 8,965,000, which is 815,000 greater than the estimated corn acreage of Texas last year.

CORN IN LOUISIANA.

The South has never been a cornless region. It has always produced corn. In 1909 the corn yield of nine cotton states was 367,635,000 bushels, or something over 22 per cent of the yield of the entire country. But the South consumes more corn

This party consisted of Profs. J. A. Jeffries of Michigan, G. J. Christie of Indiana, J. C. Klinck of Iowa; that famous corn farmer of Missouri, Hon. David Rankin, a farmer of 25,000 acres; L. B. Clore, the famous corn prize winner of Indiana; and the following Illinoisans whose names stand foremost among the great corn farmers of this state: Dean

be sent out by these people the outside world will gain a new impression as to the possibilities in corn raising down here, while at the same time Louisiana agriculturists will have their attention directed in a way it has never yet been to what may be accomplished here in the way of scientific development of corn growing. It is now conceded that too much corn cannot be raised in this country. The location of Louisiana, with its tremendously important export city, makes it possible to raise an almost unlimited quantity of corn here for export purposes whenever the demand from the outside exceeds the local demand. It is not too much to say that Louisiana has now been definitely and prominently located on the map of the United States as a corn state of present importance, with a future potentiality greater than can be accurately computed."

The most interesting personality of this group of experts was undoubtedly Mr. David Rankin, the famous Missouri corn grower and cattle feeder. His home town is Tarkio, Atchison County, where he has built a college, while many of his dollars have gone into and are now being spent annually in keeping up the standard of this school. Churches, public schools, public buildings all over Atchison County are donations of this grand old gentleman, who, in spite of his eighty-five years, is as active as the average man of forty-five. Starting a comparatively poor boy, seventy years ago in the state of Illinois, when the farmer boys kept their rifles strapped to the plow handles, he is to-day the owner of a 27,000-acre farm in the northwestern part of Missouri, of which he plants 18,000 acres to corn annually, all of the product of which is fed to hogs and cattle, and from which he receives a princely income every year. He personally directs all the business of his immense holdings, his many lands



A GROUP OF NORTHERN CORN EXPERTS.

1—E. O. Wild, editor Gulf States Farmer. 2—J. Elliott, capitalist, Chicago. 3—W. Herrick, capitalist, Chicago. 4—G. J. Christie, Superintendent of Agricultural Extension, Purdue University. 5—L. S. Klinck, Professor of Agronomy, Iowa State College. 6—A. A. Brock, farmer, Illinois. 7—W. H. Young, farmer, Illinois. 8—J. Funk, Funk Bros., Bloomington, Ill. 9—N. G. Ervin, farmer and banker, Illinois. 10—J. A. Jeffries, Professor of Soils, Michigan Agricultural College. 11—J. B. Dube, colonization agent, Chicago. 12—C. L. Van Valkenburg, bond salesman, Chicago. 13—W. W. Parrish, farmer and banker, Illinois. 14—D. Funk, farmer, Illinois. 15—A. P. Grout, farmer and capitalist, Illinois. 16—J. B. Clore, farmer and seed corn expert, Indiana. 17—E. Wisner, President Louisiana Meadows Co. 18—D. Rankin, farmer, Dean of the Corn Industry. 19—Dr. Barclay, newspaper writer and lecturer, Chicago. 20—A. T. Dusenbury, Vice-president Louisiana Meadows Co. 21—V. S. LaClair, Engineer Louisiana Meadows Co.

than it grows, having been able—or her farmers believed they were able—to grow cotton and buy corn with greater profit than to plant the cotton land to corn. But—fortunately or unfortunately, as you will—the coming of the boll weevil, a fierce enemy of cotton, which has thus far defied the attacks made upon it by the entomologists, forced many farmers to abandon cotton and to turn to something else for a cash crop. What should it be?

In connection with a brief biography, in the January number, of that progressive Louisiana farmer and business man, W. E. Glassell, of Shreveport, this paper gave some account of the work being done by the leading agriculturists of that state to turn the Louisiana farmers' attention to corn and how their efforts had been so far rewarded that of the crops of 1908 and 1909 Louisiana had corn to sell to other states and to export.

But the question naturally arose, was that success entirely natural or was it in any way factitious? Is Louisiana climate and soil naturally adapted to the production of Indian corn? In a speech addressed to the House of Representatives at Washington on June 14 last, Hon. Jos. E. Ransdell of Louisiana named three farmers whose fields of corn exceeded 70 bu. per acre; and in the same speech he named nine in Mississippi, 53 in North Carolina, 28 in South Carolina and 49 in Virginia who achieved even better results. Was this disparity due to the nature of things in Louisiana or merely to the comparative paucity of corn powers?

It was to pass upon this question, perhaps, that in July, the owners of certain reclaimed alluvial lands lying south and west from the city of New Orleans invited and brought to their lands a very remarkable gathering of corn experts of the North.

N. and Julius Funk, A. P. Grout, W. W. Parrish, W. A. Young, N. G. Ervin, D. R. Niver, J. P. and E. A. Barclay, C. L. Van Valkenburg, J. B. Dube, A. A. Brock, John H. and J. K. Elliott and W. D. Herrick. They all seemed impressed with the idea that corn is a coming staple of that state. Of the richness of the alluvial lands of the lower Mississippi Valley there never has been any question; perhaps their adaptability to corn has been questioned only because corn has not been raised. Mr. Rankin, as the result of his sight-seeing said: "Your corn is not as heavy to the ear as ours, but your growth of stalk is very much heavier and is as great a growth as I ever saw in my life, and I have inspected corn all over the world. The broadcast corn that I saw on one farm is the most wonderful crop, considering the method of sowing, I ever had the privilege of inspecting." The others were quite as enthusiastic, since seeing was a sufficient answer to any doubts such as have been raised of Louisiana's ability to grow corn—a crop which in that state in 1907 was 28,000,000 bus.; in 1908, 33,898,000, and which in 1909 reached 35,327,000 bus. Mr. Clore indeed said: "The crops being grown here have clearly demonstrated that the Central West has a strong competition. Being a corn grower, I may say that the corn inspected was far beyond my expectations. The crop was uniform, large, healthy and well-eared." Mr. Grout said: "This growth of corn is stupendous and beyond my ideas."

"The significance of this visit lies in the fact that the best scientific agricultural minds of the country will now be directed to the possibilities of corn-raising in Louisiana as they never have been before," says the Manufacturers' Record. "With the favorable and even enthusiastic reports which will



HON. DAVID RANKIN.

being operated with as much care and economy as any first-class railroad. He is his own general manager, and keeps in close touch with his assistants. A big, broad-shouldered, brainy man, with hair and beard as white as snow, he has the presence and the carriage that mark him as an unusual—a remarkable man in whatever company he may be found.

Minneapolis received a car of new spring wheat from Hasting, Minn., on July 30.

[For the "American Elevator and Grain Trade."]

ST. LOUIS AS A FIELD SEED MARKET.

BY L. C. BREED.

Inasmuch as there is a concern in St. Louis which has been engaged in the seed business for sixty-seven years, it will be seen that it is a comparatively old market. In fact, parties dealt in seeds in connection with grain long before its great rival on Lake Michigan was on the map; but many years ago Chicago had become one of the greatest seed markets in the world. Boston, New York, Philadelphia and Baltimore, however, were dealing in seeds long before even St. Louis was first settled. Toledo ranks high as a clover seed market, but this is owing to the fact that it is traded in for future delivery. Doubtless Chicago actually handles a larger quantity per annum than is the case at Toledo.

St. Louis is a primary market for red clover, as there is a great deal of this variety of seed raised in Missouri. White clover is sold only for lawn grass purposes. The sale of alfalfa is largely on the increase; among other reasons, because it does not require re-planting for eight or ten years. The head of one of the leading seed concerns here, who has traveled extensively in Europe and South America, states that he has seen as fine fields of alfalfa in country tributary to St. Louis as he has examined anywhere in the world.

The business in field seeds here is steadily increasing, and the half a dozen leading houses in this trade carry large stocks and ship to all parts of the United States.

In grass seeds, the principal demand is for timothy, blue grass and red top. There is some sale for millet and it is also used to a considerable extent in chicken feed preparations. Cane seed is in some demand.

St. Louis is a large market for seed grain. For both yellow and white corn there is a good demand each season and some varieties, such for instance



A TYPICAL LOUISIANA CORN FIELD NOT FAR FROM NEW ORLEANS.

also largely handled. Rye is widely cultivated as a cover crop; that is, it is sowed broadcast in the fall amongst corn for winter pasture and turned in in the spring. Barley also is sowed between the rows of corn in the same way and the land utilized. The trade in wheat varies very materially in vol-

aging process requires skill and long experience. While dealers do not guarantee the results of seedling, yet they are well aware that the best advertisement is a satisfied customer. Charles E. Prunty, who has been connected as boy and man with the seed trade for forty-seven years, has had his name applied to seed grain and was amused to hear of "Prunty" oats in the western section of Missouri to which he had been making shipments.

Leading dealers are inclined to believe that when the harvesting season is over, field seeds will rule higher than was the case last year, as there is an upward tendency in the market.

With respect to legislation regarding seeds, the dealers are opposed to state laws for the reason that there would be too many standards of quality, and national regulation would be far preferable, if any legislation on the matter is to be demanded. While some of the trade favor the adoption of standards, they fear the meddling with the matter on the part of state and national legislators who are not fully qualified to deal with the subject. It is pointed out that the Missouri legislature actually condemned certain leguminous weeds which draw nitrogen from the air and convert and return it to the earth in the form available for plant food.

The scientific farmer is well aware that it is more important to be concerned about the quality of the planting seed which he purchases than the price. The trouble is there are too many farmers, however, who buy weedy seed and thus keep on propagating the inferior quality. There are also some dealers in every market who encourage this false economy and cater to this class of agriculturalists. It may be that if the Government takes a hand in the matter eventually, it may go to the other extreme and set too high a standard, one which it is not practicable to live up to, say 90% pure. As it is, there is an increasing evidence that farmers are gradually coming round to see that it pays to buy good stuff, particularly in case of clover.

The leading houses in the St. Louis seed trade are the Plant Seed Company, D. I. Bushnell & Company, Charles E. Prunty, Schisler-Cornell Seed Company, the St. Louis Seed Company and the Tinsley Seed Company.

THREE NOTED NORTHERN COLLEGE CORN EXPERTS.
Prof. L. S. Klink, Prof. J. A. Jeffries, Prof. G. J. Christie.

as St. Charles County white corn, are known everywhere at the East where for thirty or more years the latter has been bought as a fodder corn, largely for use in silos. By many users it is known as red cob corn. Sowing oats, rye, barley and wheat are

done at different seasons, depending largely on weather conditions.

The leading dealers are equipped at their warehouses with the latest improved cleaning machinery, and as seed deteriorates the correction of the

New wheat began moving into Winnipeg about August 1, a week earlier than usual. It graded No. 1 and sold at \$1.01.

PRIMITIVE INDIAN CORN.

According to Prof. C. P. Hartley of the Agricultural Department, Mexico was the original home of Indian corn and Teosinte is one of the primitive types. The illustration shows Teosinte and its hybrids with Indian corn. The figures shown in the plate are of natural size and all were grown by the Department of Agriculture on the Potomac Flats near Washington.

In the cut, *a* and *b*, are ears of Teosinte showing an entire absence of cob, the kernels being attached to each other. Letters *c* and *d* show ears of the first generation cross of Teosinte and Indian corn; while *e* and *f* are a fourth generation hybrid of Teo-

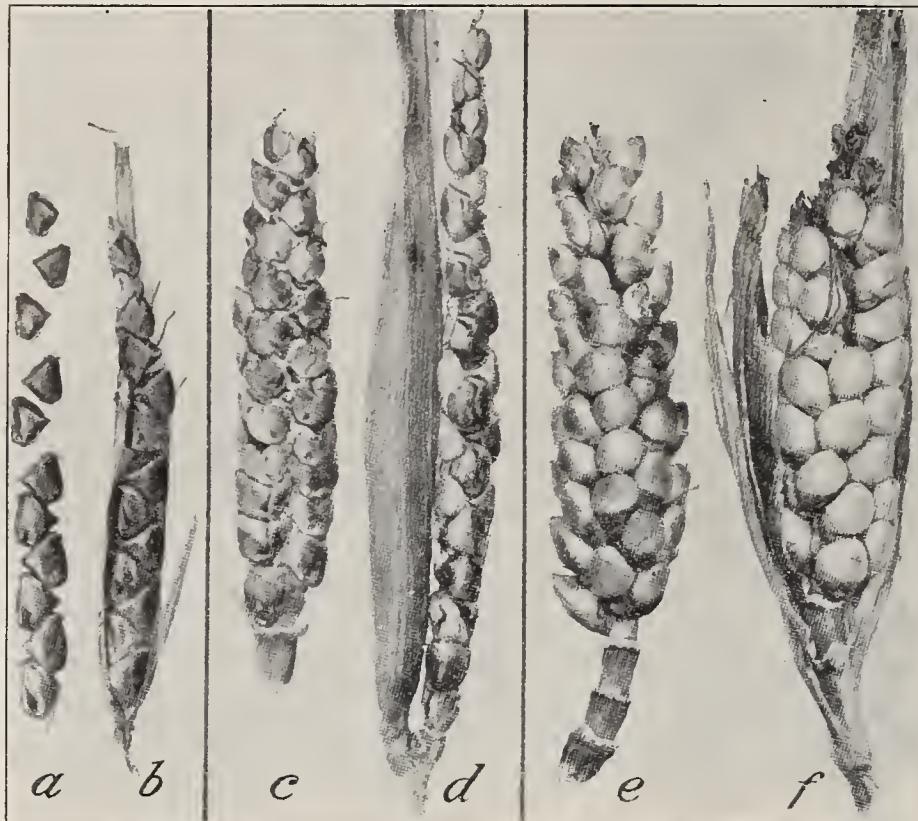
railed, frequently with disastrous results. Other women operated only on empty cars, drawing off the waste grain which lodged between the outside of the car and an inner wall, leaving an opening of several inches. The women were each fined \$13.

[From the "American Miller."]

SEVENTEEN A VERY DANGEROUS PERCENT OF MOISTURE IN CORN.

BY SOUTHERN MILLER.

I have claimed in a former article that corn should not contain more than twelve per cent of moisture to make meal that will keep a reasonable



PRIMITIVE INDIAN CORN—TEOSINTE AND HYBRIDS WITH INDIAN CORN.

sinte and corn, or *Zea canina*. Every farmer boy has run across "freaks" in the cornfield resembling more or less the figures shown.

We don't know how corn looked when Europeans first came to America. Probably it was not so well developed as at present, but it must have been cultivated for many years to have advanced from the Teosinte type to the type as found by the Europeans. The Indians in their seed selection were taken by the bright colors and the multicolored varieties still grown by many Indian tribes show that seed selection was practiced long before the days of experiment stations, although on different principles.

YELLOWING OF OATS.

The Ohio Experiment Station (Bulletin 210) has explained the cause of the yellowing of oats, a disease that is again prevalent. It is caused by a specific bacterium, and its progress is favored by cloudy, rainy weather. The disease begins as small yellow centers on the blades, which often spreads until the whole leaf is covered. In 1907 many of the fields suffered a loss of one-half to two-thirds of the crop, producing oats weighing only 22 to 25 pounds to the bushel.

Soils which are of high fertility certainly favor the oats, and it may possibly pay to stimulate the oats crop with a light dressing of a mixture of one part nitrate of soda with two parts acid phosphate, although this has not been demonstrated. At any rate, the fertilizer will not be lost if the oats is followed by wheat.

The Chicago police recently rounded up at East Chicago, Ind., a gang of women operating as grain thieves on the E. J. & E. The women gained entrance to the cars by removing a pin in the brake-shoe, which they used to pry open the car. This caused the shoe to fall, with result that when the train attained any degree of speed the car was de-

time in this country. And from reading an article on the experiments that Mr. J. W. T. Duvel has been conducting at Baltimore I am convinced that we can go very little higher than that with safety. I have read the article of his very closely, and have taken close observation of his diagram in regard to the keeping qualities of corn with different degrees of moisture in it.

He tells us that a moisture content of 17 per cent caused the corn to get hot not only once but

corn spoils and gets hot inside of nine days evidently it is not sufficiently dry to be called good dry corn, and should not pass inspection as such, and this is what Mr. Duvel proved with a lot of corn that had 17 per cent moisture.

One thing that Mr. Duvel has proven very conclusively, and that is that corn with 17 per cent moisture will keep but a very little while before getting hot. He proves what I have claimed in a former article, namely, that the temperature on the outside of the storage bin or car has very little influence on the grain in the bin. In his test the weather, or the heat outside, ran 49 degrees higher, while the corn only changed 9 degrees. This was in the case of fairly dry corn. In the case of the wet corn, the temperature increased 74 degrees inside of five days.

Mr. Duvel's diagram is very instructive. It shows very plainly that the dry corn did not increase in temperature very much, while the corn with 17 per cent moisture in it commenced to get warm from the start. The upward line in the diagram shows that after the grain was well started and got up to 60 it increased very rapidly; in fact took almost a straight upward shoot. This all shows to my mind how quickly corn will spoil and become almost worthless; I might say entirely worthless, for bread purposes.

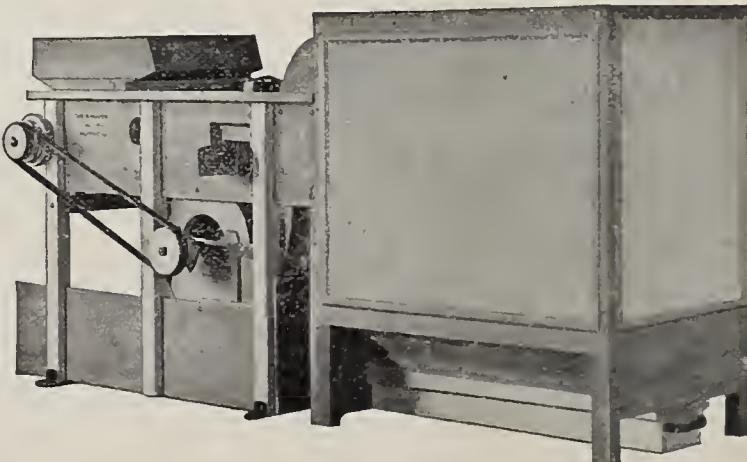
I am thoroughly convinced that when corn once gets hot and the heart gets green it makes a very dangerous food, either for man or beast. Knowing this as we do, as millers should we not be very careful to grind nothing but sound and sweet corn, whether it is for stock or for bread purposes? Then we will be sure to keep out of any trouble and responsibility for the death of stock or human beings.

THE "EUREKA" SAMPLE TESTING SEPARATOR.

This machine is built by the well known grain cleaning machinery manufacturers, the S. Howes Company, of Silver Creek, N. Y., and is claimed to be the most accurate device for ascertaining the amount of screenings or waste in a sample of grain, making it a most valuable apparatus for the use of grain buyers.

It is a model of a combined separator, cleaner and dust collector, making four separations: dust and chaff, screenings from fan, fine seeds, and dirt and rough screenings. Thus with this machine the buyer is enabled to ascertain definitely by cleaning a small sample the amount of waste or impurities in a car of grain.

The manufacturers call this machine "a genuine wheat buyer." The dust collector attachment allows



THE EUREKA SAMPLE TESTING SEPARATOR.

twice, the second time after being thoroughly aired and cooled, inside of nine days. Corn may keep thirty-seven days, as Mr. Duvel has proven, with 14 per cent moisture in it. But how much longer would it keep? Some of us have occasionally stored it a longer time than that, when laying in supplies for our meal trade.

It is just as reasonable for us to insist on having good dry corn, corn that will keep without having to shift it every week, as it is to insist on dry wheat, and in fact it is just as important that the corn be dry, as the wheat, to make good bread. If

its being placed in the office, as there is no dusting out of the machine. It is a very substantial little model, nicely finished and only occupies space 24 inches by 18 inches by 45 inches. A crank is furnished for hand power or pulley for power, as desired. Many are being operated with a small $\frac{1}{2}$ H. P. motor.

This model tester is sold at a very moderate price, and the manufacturers would be pleased to hear from millers and grain buyers who are not already supplied with one of these machines. Address the S. Howes Co., Silver Creek, N. Y., for full particulars.

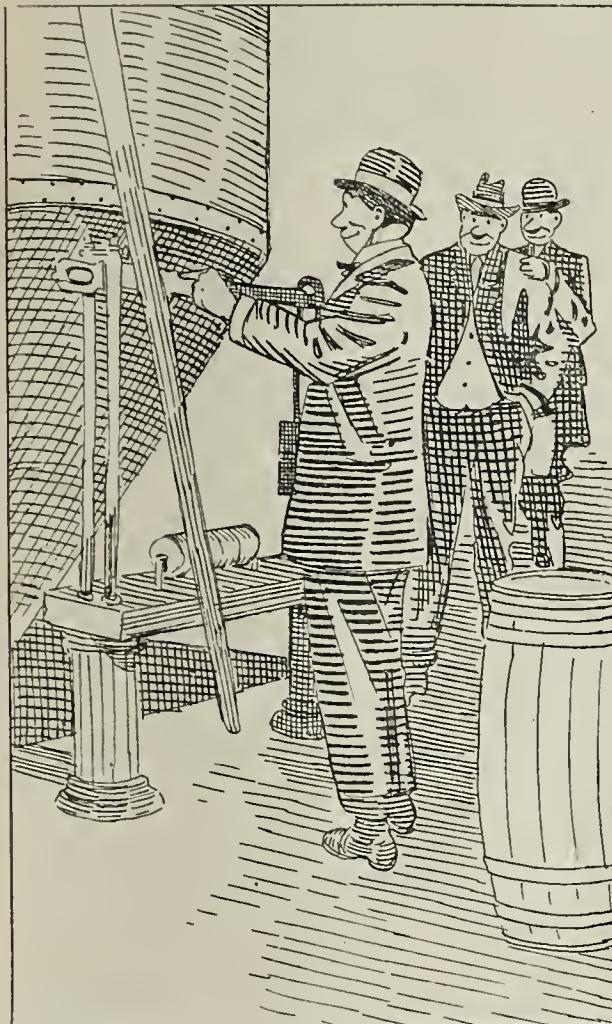
[For the "American Elevator and Grain Trade."]

THE ALCHEMIST.

BY GUIDO D. JANES.

"Sure," remarked Superintendent Foraker of the N. & O. W. Railroad to Charlie Hoard; "you can have all the cinders along the right of way between here and Ducktown, provided you replace them with crushed rock. If you were rational, I'd charge you for them; but as you are not, they are gratis."

"Thanks, sir." And bowing himself out, Charlie



"PLEASE DON'T CALL ME AN IDIOT."

left the place. A smile was upon his countenance instead of malice.

After doing this, the cinder purchaser hurried over to the Billings Grain Company office, situated several box-car lengths' distance, and clearing his throat said, "Hello."

"Good A. M.," returned Billings, Esq., president of the place; "what's doing?"

"Nothing much, sir. I just wanted to lease your empty elevator in Ducktown."

"All right. Cash or grain rent?"

"Cash. I'll give you \$1,000 per annum."

"Take it."

"Now for business," said Charlie, after quitting the grain company's office. "Get rich quick is my motto." Removing his coat then, he collected a lot of men and a bunch of coal cars, made up a construction train, got train orders and instructions from the roadmaster and sallied forth on the railroad between Ducktown and Mentor. Yes, he sallied forth quite soon after he had assembled the above-mentioned articles, folks and things, and loaded up the cars with cinders from the right of way. After which he journeyed with the load to the Ducktown elevator, and dumped the stuff into receiving pits from whence it was conveyed by elevator way up to the top of the building.

"What on earth are you going to do with those cinders, Charlie?" asked the ex-supervisor in charge.

"Yes," put in an ex-house foreman from the lower floor, "are you going to turn this institution into an idiot asylum or a grain hospital for treating us for going against our grain?"

"Neither," laughed Charlie, weighing a bunch of cinders on a hopper scale. "Please don't call me an idiot—I am not, in any sense of the word. I am a born elevator man. Grain in transit shrinks 30 pounds to the thousand. I'll shrink you that much while in transit out of this building if you don't

pause in your aspersions. I've risen from the ranks and will demonstrate same in a few minutes. Dry up now."

"All right"—"Certainly"—from the ex-elevator men.

Charlie then withdrew from the scale room, and calling in some of his elevator hands, got busy with the suction system, screens, cleaners, etc., and soon was treating the cinders. At the end of the operation, however, instead of possessing all cinders, he possessed something else in the shape of yellow grain. It was then put into sacks. By that time the ex-supervisor and ex-foreman were laughing and holding their sides to keep same from breaking; but upon observing the cinders turn to wheat they paused in their humor and sobered up.

The foreman, procuring a sack, girded it about his loins, and shaking some ashes out of a pipe, went up to Charlie in sack-clothes and ashes. Whereupon he apologized.

"You're a wonder," said he, addressing the lessee of the place. "You're way ahead of Cook or Peary."

"You bet he is," said the ex-supervisor. "You are a regular out and out alchemist, for you have turned cinders into golden grain. I am contrite, to say the least, for my rudeness toward you."

"No apologies necessary," laughed Charlie sweetly. "I am no wonder. I used common sense. You employed prejudice. I have taken advantage of the railroad's recklessness in giving leaking grain cars to the shipper. The road scattered wheat along the right of way. I picked it up."

"Good scheme," returned the ex-supervisor. "I guess I'll try the same stunt on the O. K. & P. Railroad."

"You can't," spoke up a workman. "Mr. Hoard has options on all the railroads in this part of the land."

"Oh, well, then," addressing Charlie, "give me a job, will you. I need one."

"Sure."

"Thanks."

"Keep the change."

GERMAN OATS AND THE IMPORT DUTY DRAWBACK SYSTEM.

There having been of late years considerable exportation of oats from Germany to England,—a movement that is more or less abnormal in the nature of things,—a British consul explains the drawback system in vogue in Germany that makes such business possible. He says:

As regards oats, of which there has of late years been a steadily increasing export to the United Kingdom and other countries, including even Switzerland, a good deal of attention is being directed to the operation of the zollgutschein, or drawback system. Under this system shippers of grain obtain, for every ton which they export, a certificate entitling them to a drawback, or customs credit, to the value of anything that they may subsequently import. That is to say, if they export a ton of goods on which the import duty is 40 marks, they receive a credit note by which they are entitled to import goods to that value. The original intention of the government was that the zollgutschein should be only applied to the case of imports and exports of the same kind, e. g., that exporting corn would only entitle a shipper to import the same amount of corn free; but yielding to pressure from the landed interest, the present working of the system is now allowed to be this, viz., that a farmer or land-owner may export corn, the customs duty for the importation of which would be £100, and then, when he desires to import coffee, tea, petroleum or textile goods, which ought to pay £100 in customs duties, he has only to produce his zollgutschein, or einfuhrchein, and then receive these articles free of duty.

Without proceeding to a longer explanation, it may be observed that the government has discovered the injustice (from their own point of view) of this arrangement, which is practically a huge bounty system, and now estimates the loss to the revenue at an enormous annual sum.

Oats never used to be an article of export, and it is only since the introduction of the zollgutschein system that they have been grown for the sole purpose of being shipped to the United Kingdom and elsewhere. These shipments of oats generally contain a certain proportion of barley, and the finance minister has lately ordered that if this proportion exceeds 2 per cent the zollgutschein shall be given as for barley exclusively, i. e., that the

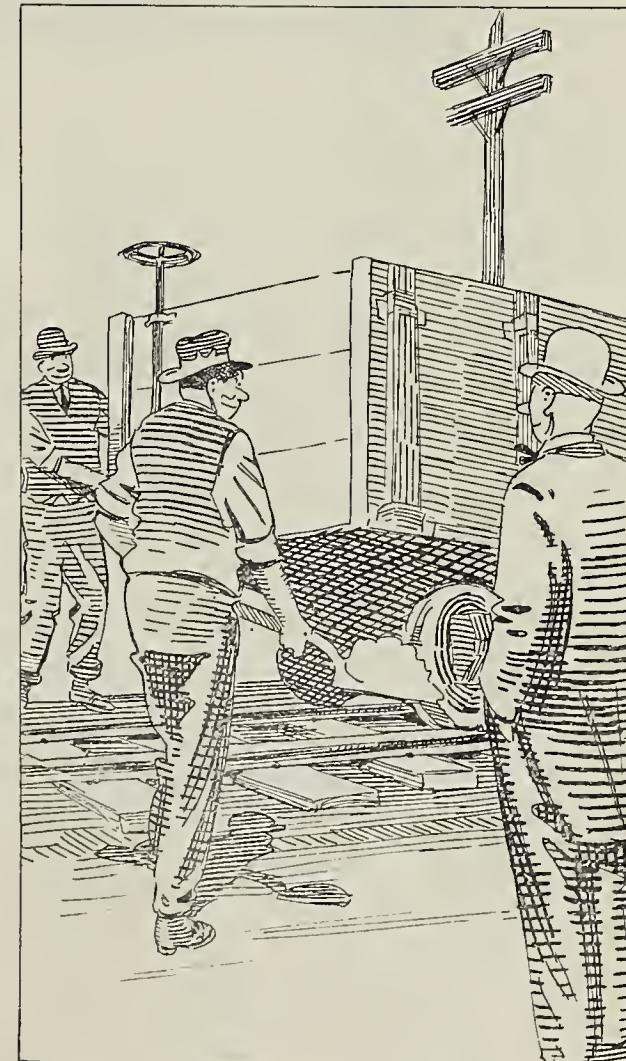
drawback shall be about a third of what it would be if the oats were pure. A vigorous agitation is now going on to induce the finance minister to grant the drawback on each proportion of the two grains respectively; though at first sight it would certainly seem an almost impossible labor for even German officials to ascertain the exact proportion of barley that every large cargo of oats may contain.

THE ZOLLGUTSCHEIN APPLIED TO RYE.

The same system applied to rye accounts for the phenomenon of American imports of that cereal recently. "How does it happen," asks the New York Journal of Commerce, "that German farmers who think they need a duty of 50 marks a ton—equivalent to 30 cents per bushel—on rye, are able to export that grain to the United States, which is normally a country of cheaper grain production than Germany? The answer is to be found in certain queer agrarian provisions of German laws. Germany has what amounts practically to a bounty system on grain exports." And the Journal then makes the explanation given above, and adds:

This system of export certificates, according to press reports, is having a curious result across the Russian frontier. Since the duty on rye was raised to 50 marks in 1906 the practice has sprung up of sending German rye across the border to have it ground there. The flour is then sold in Russia, but the bran is brought back to Germany to be used as feed for animals. In the interests of the live stock industry bran is allowed to enter the country free. The Russian mills have a great deal of the flour in the bran as a rule; but in the case of German grain, when the bran is to be returned, nearly half of the weight of the grain is left in the bran so as to make it more valuable for feeding. Thus the German farmer who sends his rye across the frontier can bring back half of it in the form of bran and pocket a profit of 15 cents a bushel on it.

How this system works in causing the establishment of mills in Russia is shown in the case of the city of Kalisch. Several years ago, it is reported, there was only one steam mill there, which had a capacity of 10 to 15 tons of grain daily. Now the steam mills there consume 400 tons of grain a day,



LOADING UP THE CARS.

nearly all of it German rye, and another mill of 250 tons daily capacity is now being built by a German grain exporter. Similar reports come from other Russian frontier towns.

There were sales on the Chicago Board of new No. 3 corn for December delivery on July 29 at 56½c., the first trades of this character so far this season.

AGRICULTURAL CONSERVATION.

Among the notable addresses at the annual mass convention of the Millers' National Federation, was one by President W. C. Brown on "High Cost of Living." Mr. Brown attributed the present high level of agricultural prices to reckless exploitation of American lands and inadequate culture of them by the farmer of today; and he sees in the near future still higher prices and much distress among the poor unless our soils are better taken care of and our methods of farming greatly improved upon. Our agricultural experts are declining and come into competition with the virgin lands of the Argentine. At the present rate of loss of exports, we are on the verge of becoming a debtor nation in the world's markets.

Conservation of our soil fertility is therefore, in the mind of Mr. Brown, the first essential of future agricultural ease in this country; and for the purpose he makes the following suggestions:

The question, then, is essentially an economic one—a question of the gravest importance, to which should be directed the most mature wisdom, conservative judgment, and untiring energy of the most constructive, progressive minds of the nation.

In this economic evolution we are not following an untried path. Other nations have been confronted with the same great question. "How shall we be fed, and wherewithal shall we be clothed?" and upon the wisdom with which the question has been solved has hung the fate of those nations.

More than a century ago the production of wheat in Great Britain had gone down to about the average of this country today, viz: a fraction less than fourteen bushels per acre.

A royal commission was appointed, which has been in continual, active existence ever since. The yield of wheat was gradually brought up to thirty-two bushels per acre, and at that figure it is maintained year after year.

The story of this campaign for improved agriculture in England is exceedingly interesting, and, in the present juncture, of profound importance to this country.

The islands of the sea have been swept clean of their rich stores of guano, the accumulation of ages. Phosphates have been imported by the millions of dollars' worth from the United States. The battlefields of Europe were combed, the catacombs of Egypt rifled, and for years the bones of three million men were ground up annually and used to bring the soil of England back to its present fertility.

Approximately \$5,000,000 worth of our phosphates are being exported each year. In some way this should be stopped. In the years to come this master fertilizer will be worth more than gold.

I believe it is well within the bounds of conservatism to say that long before the middle of the present century the phosphates which we export annually, and for which we receive \$5,000,000, will be worth \$500,000,000 for fertilizing our own land.

It is safe to say that no country of the world excels the United States in natural fertility of soil, or has a more favorable general climate.

Notwithstanding these natural advantages, with our careless, uninformed methods—our utter want of method—our farms produce an annual yield of less than fourteen bushels of wheat per acre, as compared with thirty-two in England, twenty-eight in Germany, thirty-four in the Netherlands, and twenty in France.

We produce an average of less than twenty-three bushels of oats per acre, while England produces forty-two, Germany forty-six, and the Netherlands fifty-three.

Germany, with an arable area of less than some of our larger states, produces more than seven times the number of bushels of potatoes than are produced in all the states.

The increase value of corn, wheat, oats and barley in the United States, provided the average yield per acre of the same crops in Germany has been raised, and assuming a production of fifty bushels of corn to the acre, would have amounted to \$3,250,000,000 for the crop of 1909; and, undoubtedly, this increased production of grain would have enabled this country to have held the first place as a meat-exporting nation, which we have been compelled to surrender to Argentina.

There is no alternative—we must increase production per acre by more intelligent methods, or we must face the relentless, certain coming of the day when we shall not produce food enough to supply our own necessities.

In the issue of the Saturday Evening Post of May 7, is an extremely interesting article from the pen of F. D. Coburn, commissioner of agriculture for the state of Kansas, and one of the most able, progressive men in the country.

I quote the following from this article:

"Is wheat bread to become a luxury rather than a staple? James J. Hill says that, at the present rate of increase in population, the ratio of production remaining the same, within twenty years a large part of the people will go to bed supperless. The Northwestern Miller, one of the high flour and milling authorities in its issue of March 23, said: 'The problem of giving the masses bread is becoming the question of the hour; beside it all others are insignificant.'

Commenting upon this, Mr. Coburn says:

"These were not idle remarks, but the result of close observation and study by the shrewdest of the

shrewd; and they present the most serious economic problems, facing the American as well as the European public. The question of trusts, the graft scandals and other like issues will solve themselves, and though the evils incident to them may not be checked at once, only a comparatively small number of persons will be directly affected.

"Kansas land planted in wheat produces an average of from thirteen to fifteen bushels per acre. Men write of the 'Shame of the Cities,' and of the 'Crimes of Society,' but this is the 'Crime of Agriculture.' The average yield per acre is a disgrace. The farmers are not seizing the opportunities among which they are thrust; they are not doing justice to the land and climate with which a generous Creator endowed them.

"The question of bread supply confronts every individual in every civilized country. No one community, but the whole world, has to meet it. A bread shortage is coming if we continue to grow in population at our present rate unless something is done to increase production."

Herein, therefore, lies our anxious solicitude for better, more intelligent, more scientific fertilization and cultivation of the soil.

In the solution of this great problem lies at once the farmer's opportunity for broadened prosperity and his duty to do all in his power to avert a national calamity, for in his hands just now more than in any period in our history lies the vital issues of national life or death.



PRESIDENT W. C. BROWN.

A comparison of the year 1909 with 1899 shows the following conditions:

Acreage of cultivated land, increased.....	23%
Production, increased.....	26%
Consumption, increased.....	60%

In other words, population (or consumption) increased in ten years almost three times as fast as acreage, and almost twice as fast as production.

Do not these facts indicate a most serious present economic problem and foreshadow a most dangerous economic crisis in the not distant future unless a very radical change in conditions can be brought about?

No danger which has ever confronted a nation compares with the danger which comes from an inadequate food supply. Necessity knows no law, and hunger is necessity's last and most dangerous extremity.

Here lies the farmer's marvellous opportunity and his solemn duty. Here is spread out before the farmers of the country, and especially the boys and young men on our farms, a work of broad-minded unselfish devotion, an important and as lofty in its aim as has ever inspired the patriotism, the love of home and country, of the citizenship of this great nation.

We may be wasteful and careless of everything else; but "the land belongs to the ages"—it is ours but for the brief period which marks the passing of a generation.

Vouchsafed to us by the kindly hand of a generous creator, it is for us to hold this land as a priceless heritage for generations yet unborn; realizing that the happiness, the comfort, yes, the very existence, of our children's children, and the millions who will follow us, depends upon the conscientious far-seeing wisdom with which we discharge this solemn trust.

The farmers around Brookhaven, Miss., have "demonstrated" winter wheat growing to their satisfaction this season, the crop having yielded at the rate of 15 to 20 bushels per acre; and the first time self-binding reapers and threshing machines with

straw baler attached have been introduced in this county, and the exhibitions of wheat and oats threshing on the streets of Brookhaven have attracted and been favorably commented upon by hundreds of farmers.

CORN BELT MOVING NORTHWARD.

One of the most important developments in crop growing of the last decade is the distance north to which the corn-producing belt has moved. It is only a few years since northern Iowa was considered too far north to successfully grow corn, while Minnesota and the Dakotas were not to be mentioned in the same breath with corn-growing states. Most corn growers formerly considered that the corn plant was fitted by nature to certain climatic conditions and that outside of the territory having these conditions it would be impossible to grow it. Others recognized that the habits and growth of the corn plant are susceptible of change and, therefore, can be adapted to different conditions of growth. Even the most casual observer will be impressed by the correctness of this latter view, should he travel over Minnesota or the Dakotas during the crop-growing season. The corn harvesting belt has moved northward steadily every year, until in some small instances it has even crossed the International boundary and has been quite successfully grown in Canada.

This change has been more in the nature of a gradual growth than any sudden movement. Each year corn has been grown on a greater scale, a little farther north, gradually adapting the corn plant to the rigors of the climate and gradually developing an earlier maturing grain, the seed of which, in turn, has been planted still farther north, until the crop has been bred to grow in all parts of the wheat-growing northwest.

NORTHERN CORN DIFFERENT.

This northern-grown corn differs somewhat from the heavier article grown in Illinois and other parts of the so-called corn belt. The foliage is not so heavy, stalks are shorter, leaves narrower and the ears smaller. The ears begin to shoot nearer the surface of the ground and begin to mature a great deal earlier than in more southerly climates. These characteristics would be expected of plants grown under the conditions of a short growing season.

As to yield, of course, no one would expect the heavy output per acre obtained upon the ranker growing fields of the corn states. The corn, however, is solid and heavy; the ears small, but compact, and yields of from 35 to 40 bushels are by no means uncommon.

[Corn is in demand as a factor in the crop rotation and in connection with the dairy, to which it is an important accessory, making stock feeding possible.]

The extent to which corn growing has advanced is shown by the fact that only last year in North Dakota, within twenty miles of the international boundary, average yields of 40 bushels to the acre of matured grain were secured. In this state alone in 1909 no less than 123,839 acres of corn were raised, of which 86,216 acres were cut for fodder and the remainder husked in the field and the stalks pastured. The dairy interests have advanced in like proportion, until, at present, there are not less than 85 creameries in North Dakota, where a very few years ago the corn and dairy products were close to nothing.—Orange Judd Farmer.

William Struthers, a farmer in the Walla Walla district, made the record price for wheat in the Pacific Northwest on July 26, when he sold 18,000 bushels of new bluestem to F. S. Dement of Walla Walla at 90 cents a bushel. The wheat is high grade and tested more than 61 pounds. Frank Dorgan of the Farmers' Warehouse Company at Ritzville, Wash., bought a load of bluestem No. 1 from Fred Anderson at 80 cents on July 25. The first load of new wheat in 1909 was marketed on July 21 and sold at 90 cents. Farmers in Columbia county have refused offers of \$1 a bushel. The recent rains have benefited spring wheat.

COMMUNICATED

[We invite correspondence from everyone in any way interested in the grain trade on all topics connected therewith. We wish to see a general exchange of opinion on all subjects which pertain to the interest of the trade at large, or any branch of it.]

BUSINESS CONTINUED.

Editor American Elevator and Grain Trade:—F. H. Bennett, formerly of The Bennett Commission Company of Topeka, Kansas, died at his home in Topeka, on the morning of July 12th, 1910.

Mr. Bennett had been suffering from kidney and bladder trouble for several years. His widow and one son, Arthur, survive him.

The business of the Bennett Commission Company will continue as before under the care of A. H. Bennett.

Very respectfully, A. H. BENNETT.
Topeka, Kans.

COLLECTION OF CLAIMS IN ILLINOIS.

Editor American Elevator and Grain Trade:—February 19, 1910, Messrs. E. T. Holloway & Son, of Wing, Ill., filed through the claims department of the Illinois Grain Dealers' Association a claim for \$68.28 against the Wabash R. R. Co. for lumber furnished for coopering cars, and for car doors, which claim, after a full investigation, has been paid in full, thus establishing the position taken by the Association that carriers are liable for materials furnished by shippers to put cars into proper condition for receiving grain.

This shows what persistent and constant negotiation will accomplish when backed by organized shippers. Much credit is due to Mr. Wm. R. Bach, of Bloomington, attorney for the claims department of the Association, for his insistence and constant pressing of his views upon the carriers.

Members of the Association and all other grain dealers will be greatly benefited by this action of the Wabash R. R. Co. in assuming the liability for materials furnished, when necessary for coopering cars and for car doors.

Members of the Association are invited and urged to file claims through the claims department in like cases, as well as for losses of weight in transit and for losses occasioned by delayed delivery.

Correspondence is invited. Information will be furnished without cost; blanks will be supplied free; and there will be no charge unless there is a collection made.

Respectfully yours,
Pontiac, Ill. S. W. STRONG, Sec'y.

CROPS IN THE SOUTHWEST.

Editor American Elevator and Grain Trade:—I beg to hand you a summary of reports made on the Texas corn crop, compiled from replies received during the week preceding this date. Since most of the replies reached me, weather conditions throughout nearly all parts of the state have been unfavorable to late planted corn.

The following results are shown by the reports, fractions being disregarded, and comparisons based on normal.

Acreage for entire state..... 104%
Condition for entire state..... 74%
Promised average yield per acre..... 22 bus.

From the reports it appears that about 15 per cent of the corn acreage of the state will be almost if not wholly lost by drouth. The crop in central and north Texas is very spotted, parts of some counties making good crops, were almost a total failure in the other parts of the same counties. For instance, Dallas, Collin and Grayson report a good crop, while Fannin will have only about a half crop.

The corn crop in the south part of the state is reported good to large. Harris county has an excellent crop of corn. In the south part of the state corn is made, and some new corn is being offered for sale in counties near the coast.

In central Texas the corn is only a fair crop, but far better than the crop of last year.

In the north part of the state the crop is gener-

ally good, some counties reporting that a surplus will be raised.

In the western part of the state the crop is not so good, and quite a number of counties report the yield from nothing to ten bushels per acre.

In the counties on the plains and in the extreme north parts of the panhandle, the corn crop is better and should make a good yield.

The U. S. Government report gives the Texas acreage of corn at something over 8,000,000 acres. I am inclined to think that we will harvest about 7,500,000 acres of corn this season, with an average of about 20 bushels per acre, thus making the promised corn crop of the state about 150,000,000 bushels.

The hay crop of both Texas and Oklahoma will be very short, and there are but few counties in central and north Texas that will have any hay for sale.

The corn crop of Oklahoma is a little later than the Texas crop, and damage has been reported in that state from dry weather. There is yet time for material damage to late corn, both in Texas and Oklahoma.

The Texas cotton crop is reported generally in



THE BLACKFORD COMPANY'S ELEVATOR AT OSKALOOSA, IOWA.

good condition, but the crop is late, and many places report the plant as being small.

Yours truly,
Ft. Worth, July 23. G. J. GIBBS, Secretary.

CORN IN NATAL.

The Natal correspondent of the Corn Trade News under date of July 1 says that, "Reaping is now in full swing, but reports now to hand as to the final yield are somewhat disappointing, and it appears as if we shall not even reach the exportable surplus we estimated last month of 157,500 tons.

"The Natal Agricultural Department estimates the yield for Natal at 645,000 muids, and with their estimate of established home consumption at 350,000 bags, we should see a surplus of 295,000 bags; this against our estimate of 257,000 bags last month. Our opinion is, that owing to the bad native crop, our home consumption will be larger this year, and we should not be surprised if Natal's exportable surplus only reaches some 200,000 bags.

"Nothing more definite can be reported from the O. R. C. and the Transvaal, except that owing to the very low prices now ruling for maize, we do not expect much of this crop to move until prices improve, failing this the bulk will be kept over until next year."

Alaska is not generally given much consideration from an agricultural standpoint, and yet, despite the rigorous climate, a large variety of grains, small fruits and vegetables are being successfully grown. The work conducted by the Government with grains at the Rampart Experiment Station has been an unqualified success. Varieties of nearly all grains have been found that grow well.—Press notice of "Annual Report of Alaska Agricultural Experiment Stations."

THE BLACKFORD COMPANY.

Somewhere in their advertising literature The Blackford Co. of Oskaloosa, Ia., call their business premises "The Market for Everybody." The name is well chosen, especially when addressed to the farming community in touch with that city, for the company are not only dealers, wholesale and retail, in flour, feed, oil meal and buyers and shippers of grain but also dealers in hard and soft coals.

Their elevator, shown in the picture, is built on a concrete foundation running from ground up through the warehouse building. The dimensions are as follows: 20x22 ft., cribbing; cupola on top of cribbing, 16x20 ft. wide, 16 ft. high, with sheller and cleaner in cupola. The elevator is divided into ten bins.

The warehouse building is 72x120 ft. on the ground and 20 ft. high to the square, with a 19-ft. driveway running through center of building. On one side of the driveway the space is used for fuel, coal and for storage of mill feeds; that on the other side for the storage of hay and straw.

The elevator is equipped with all the latest im-

proved elevator machinery which is driven by a 15 horsepower electric motor. There is also a feed grinder, or chop mill, which is driven by the same motor, to make chop feed for the company's trade. This equipment enables the company to do a large wholesale feed business. The circuit is to spout the grain from the elevator through the grinder and then into bins and sacks as circumstances suggest. This system reduces the cost of feed to a nominal figure only.

FARMERS WANT RECIPROCITY.

The farmers of the Canadian West, during Premier Laurier's recent tour, bombarded him with a request for tariff revision ("downwards") and reciprocity with the United States. One of the numerous memorials to this end said:

There are no trade relations our government could enter into with any country with better advantages to the farmers of the West than a wider measure of reciprocity toward the United States, including manufactured articles and the natural products of both countries. Such a trade policy would give to the Canadian farmer a better market to which to sell and a cheaper market in which to buy.

We have made arrangements to extend our trade with Germany, France, Italy and various small countries, which is all right; but why not make an effort to enlarge our trade with the 90,000,000 of people right at our very doors who offer the best market.

Steamship *Rheingraf*, a German freighter running between Boston and Havana, Cuba, was compelled to sail from Boston on July 21 without a cargo item of 12,000 bushels of oats, owing to the fact that the oats, shipped in ten cars, were held up at White River Junction by the strike on the Grand Trunk Railroad.

[From Farmers' Bulletin 395.]

SIXTY-DAY AND KHERSON OATS.

By C. W. WARBURTON,*

Agronomist in Charge of Oat Investigations, Bureau of Plant Industry.

Practically four-fifths of the oat crop of the United States is produced in the thirteen states extending from New York and Pennsylvania westward to North Dakota, South Dakota, Nebraska, and Kansas. Each of these states annually devotes more than a million acres of oats. The average yield in the six northernmost states, New York, Michigan, Wisconsin, Minnesota, North Dakota, and South Dakota, is 31.68 bushels to the acre, while their total production is slightly less than one-third of the oat crop of this country. The average yield of the other seven states (Pennsylvania, Ohio, Indiana, Illinois, Iowa, Nebraska, and Kansas) is only 29.23 bushels to the acre, yet they produce more than half of the entire crop. The difference in yield of nearly two and one-half bushels to the acre between these two groups of states is due largely to the fact that the climatic conditions of the northern group are better suited to the production of the crop.



Fig. 1.—Heads of Sixty Day oats.

There is no material difference in soil preparation or other influencing factors.

Oats are grown in the corn belt, which includes all the states of the second group, largely because a small-grain crop is needed in the rotation and because the grain is desired for feeding to work stock. Spring wheat is seldom satisfactory in this district, and winter crops often do not fit well into a rotation which ordinarily includes corn, a small grain, and grass. Under these conditions oats are generally grown as the best crop between corn and grass. This is particularly true in Illinois and Iowa, the two states producing the greatest quantity of both corn and oats.

THE NEED FOR EARLY OATS.

There are several factors which reduce the yield of oats in the corn belt. Poor preparation of the soil, unfavorable weather conditions, injury from rust and lodging, and the use of unsuitable varieties are among the most potent influences. All these deterrents, except poor preparation, may in a measure be overcome by the sowing of varieties better suited to the conditions of the section where they are grown. In general, those best adapted to the corn belt are those which mature earliest, for early maturity often enables a crop to escape the hot weather, injury from storms, and the attacks of plant diseases. The early varieties also usually produce less straw, and for that reason are less likely to lodge than the ranker growing late varieties. A number of years ago the Early Champion and the Fourth of July varieties came into prominence, but they are not now extensively grown, for, although early in maturing, their yield is often unsatisfactory. Burt is a very early variety much used for spring seeding south of the Ohio River but little known elsewhere. The type of early oats now most largely grown in this country is represented by the Sixty-Day and the Kherson varieties, two comparatively recent introductions from Europe. Their

adaptation to our conditions is discussed in this bulletin.

HISTORY OF KHERSON AND SIXTY-DAY OATS.

Most of the varieties of oats now grown in the northern half of the United States came originally from northern Europe or have been produced from varieties from that section. Our great central valleys are, however, subject to high summer temperatures not found in the more equable climate of northern Europe, and for that reason the varieties of oats from Germany, Sweden, and similar European sources have not been altogether satisfactory in our corn belt. Conditions more nearly approaching our fertile prairie sections are found in the chernozem, or "black-earth" district of southern

DESCRIPTION OF KHERSON AND SIXTY-DAY OATS.

The two varieties, Sixty-Day and Kherson, are so similar in appearance that the same description may be applied to both. The plant is a vigorous but not rank grower, usually less inclined to lodge than varieties with coarser straw. The head, or panicle, is loose and spreading, bearing a large number of grains. The grain is small to medium in size, long, and rather slender, but, under favorable conditions, plump and well filled. Heads of Sixty-Day oats are shown in figure 1, while figure 2 shows heads of this and of two other varieties imported by the United States Department of Agriculture. The color of the Sixty-Day and the Kherson oats varies with the locality. In the corn belt the grain

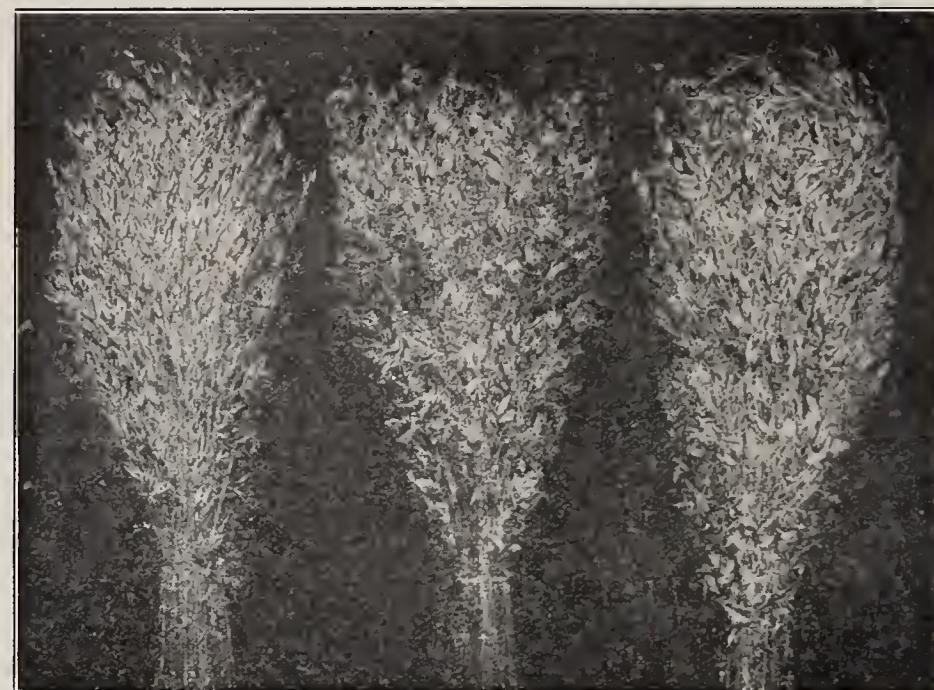


Fig. 2.—Heads of three varieties of oats imported by the United States Department of Agriculture, the Sixty-Day on the left, the Swedish Select in the center, and the North Finnish Black on the right.

Russia. This district is one of wide extremes of heat and cold, with rather low rainfall. The hot summer and rich soil make it comparable with the corn belt, and though the rainfall is lower it is readily seen that varieties of grain of value there are likely to prove desirable over a large portion of the United States.

The Nebraska Agricultural Experiment Station secured seed of an early variety of oats from this section in 1896 through Prof. F. W. Taylor, then superintendent of farmers' institutes in Nebraska, who obtained it in the course of a journey through Russia. This seed was sent out under the name Kherson, that of the district from which it came. It was quite widely distributed in Nebraska, but for several years was little known outside that state. In March, 1901, an importation of a similar variety was received by the United States Department of Agriculture from Mr. C. I. Mrozinski, of Proskurov,

is a deep golden yellow, while farther north and in drier sections it is much paler, becoming almost white in the extreme West and Northwest. The hull is very thin and the weight per bushel usually high. The crop ordinarily reaches maturity in 90 to 100 days, or about 10 days earlier than most of the varieties commonly grown.

DESIRABLE AND UNDESIRABLE CHARACTERS.

The principal objections urged by farmers against this class of oats are the yellow color and the small size of the berry. In some markets there is a discrimination in favor of white oats of 1 or 2 cents a bushel, but by far the larger portion of our oat crop is fed on the farms where produced, and yellow oats are just as good for feeding as those of any other color. On the other hand, on account of its thin hull this particular type of oats is higher in feeding value than are most other varieties. In tests

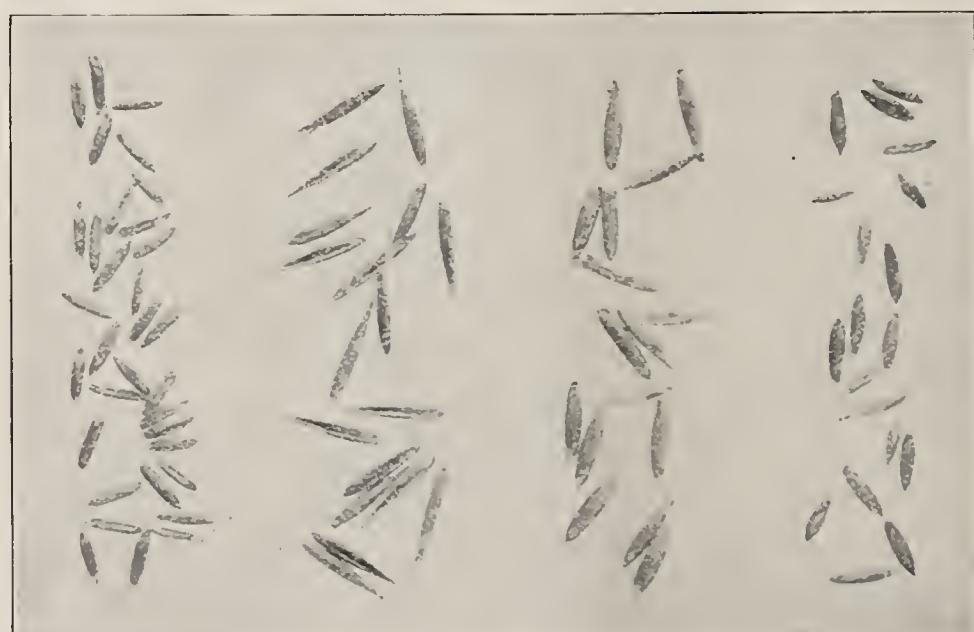


Fig. 3.—Grains of the Sixty-Day (left half) and the Swedish Select oats (right half) with and without hulls. The sample of Sixty-Day contains 73.5 per cent of kernel, while that of Swedish Select contains but 69 per cent.

in the Podolia government of Russia. This province lies just west of the Kherson government and its climatic and soil conditions are much the same. This variety was received as "Sixty-Day" and has been widely distributed under this name. It closely resembles the Kherson and is practically identical with it, although under the same conditions there is sometimes considerable variation in yield.

made some years ago by the writer in which samples of a number of varieties from Wisconsin, North Dakota, Kansas, and Montana were examined, the Kherson and the Sixty-Day oats ranked highest in the proportion of kernel to whole grain in every case. The highest percentage recorded was 78.07, from a sample of Kherson grown in Wisconsin in 1905, while the lowest was 54.86, from a sample of

*Extracts from Farmers' Bulletin 395, published by the Department of Agriculture on May 5, 1910.

white oats grown in the same state the following year. Kherson and Sixty-Day oats grown under exactly the same conditions as this latter sample showed more than 70 per cent of kernel. The average of 12 samples of these two varieties showed 73.3 per cent of kernel, while 39 samples of other varieties showed 69.2 per cent. On this basis, where ordinary oats are worth 50 cents a bushel for feeding, the Sixty-Day and the Kherson are worth 53 cents. Frequently the difference in favor of the latter varieties is even greater. The North Dakota Agricultural Experiment Station says that on account of its thin hull the Sixty-Day is worth 4 or 5 cents more a bushel for feeding than some other varieties. A comparison of the grain of Sixty-Day and that of Swedish Select, a medium-late, large-grained oat now very popular in the northern states, is shown in figure 3. The weight of 1,000 grains of this sample of Swedish Select was nearly one and one-half times that of the same number of grains of the Sixty-Day sample, but the proportion of kernel to hull was considerably larger in the latter.

In some sections the Kherson and the Sixty-Day oats mature at the same time as winter wheat, and for that reason are not popular, though by some the fact that they can be harvested and thrashed at the same time as wheat is considered an advantage. This early thrashing enables the grower to market his oats ahead of the main crop, sometimes at much better prices than can be obtained later. In the spring-wheat district or where large acreages of oats are grown, they extend the length of the harvest season.

On account of their short straw and early maturity they are among the best varieties for use as

maturity, heavy yield, low proportion of hull, and resistance to lodging.

The most satisfactory type of early oats now grown in this country is that represented by the Sixty-Day and the Kherson.

In the corn belt, which is also the area of greatest oat production, those varieties of oats which mature early give the best yields.

The Sixty-Day and the Kherson oats have given best results in the corn belt and on the dry farms in the Great Plains and Intermountain districts.

These two varieties, which are practically identical, were both introduced from southern Russia, the Kherson by the Nebraska Agricultural Experiment Station and the Sixty-Day by the United States Department of Agriculture.

THE OHIO CROP REPORT.

It has always been the boast of Ohio that her citizenship was just a little different from that of any other part of the United States—that they represented a little broader development of all the attributes. A good man in Ohio is a little better than a good man anywhere else. It must be, too, although they do not say so, that a bad Ohio man is a little worse than a bad man anywhere else. Ohio's claim to distinction is her evolution from the Connecticut Western Reserve—all the good qualities of the Yankees being liberalized by environment and 200 years' struggle for success. They "point with pride" to their long list of contributions to statesmanship—Taft, McKinley, Garfield—to say nothing of justices of the Supreme Court, of ambas-

of Ohio itself in the same way. It appears to be one of the functions of this Department to take the whole state to task for its shortcomings as it sees them. Beginning with page 60 of the Official Bulletin are three and a half pages of "Items of Interest—Department of Agriculture," the burden of which is that the state of Ohio, with the exception of the Agricultural Department, needs reformation of the most radical kind. As for the department in question, it has made wonderful strides in spite of the handicap of an unappreciative, not say very wicked, legislature.

The following are some official Ohio items of interest:

A Jersey bull recently sold for more money than Ohio appropriates to inspect its nurseries and orchards.

In 1908 six times as much money was appropriated for the Ohio National Guard and eight times as much for the canals as was appropriated for the Department of Agriculture.

In 1908 the sum of \$35,000 was appropriated to investigate "graft" in one Ohio city. That same year the direct appropriation for the "Encouragement of Agriculture" was only \$26,000.

Ohio's taxation system is miserable and farcical. One county swears it has forty-two watches. Legislative doctors are now trying to cure our tax laws. Governors, lawyers and statesmen invented our tax scheme, yet the Agricultural Department is in better condition today than Ohio taxation.

It is officially stated that: Primary and election laws enacted by one body of men are revised or repealed by the next, and cussed by the politicians the same as if they were the Department of Agriculture.

Some states have a well defined school system and policy. Ohio is admittedly groping in the dark. Education, especially in the rural schools, is not a neck ahead of agriculture.

Adjoining states have adequate quarantine laws which prohibit the importation of diseased live stock. Ohio does not have such an adequate law, and is therefore a dumping ground for animals that may not be sold elsewhere.

Summarizing its own work, the Department of Agriculture of the State of Ohio presents the following as facts:

Over one and a half million pieces of mail matter have been sent out by the Ohio Department of Agriculture during the past year. Interests in better agriculture was never so intense and earnest as now.

If reports and rumors are true of the findings of legislative probe committees, more "pay dirt" has been struck in some other departments than ever has or ever will be found in the Ohio Department of Agriculture.

The Ohio Department of Agriculture has accomplished more work in its several divisions in the past year than other state Departments of Agriculture in the United States.

Our Official Bulletin is no longer a half dozen pages of crop reports, but contains from 64 to 80 pages of subject matter of interest to all citizens. It has grown from a list of less than 2,000 to 67,000 copies. The work of mailing these thousands out has largely increased our labors. Many requests are received every day for this publication.

The report contains much matter of general interest and a speech by Governor Harmon.

WANTED TO KNOW.

The Secretary of Agriculture, in an address at Washington, said of farming: "The successful farmer loves his work. Every detail of it interests him. Thus Squire Plowlands proved himself a poor theologian, but a grand farmer, when he met, one Sunday morning, his tenant, Hodge."

"Where have you been, Hodge?" said the squire.

"I've been to church, sir," Hodge replied.

"What was the sermon about, Hodge?"

"It was something about Joseph going down to Egypt to buy corn, squire."

"The squire brightened."

"Did the parson say what corn is worth down there?" he asked."—St. Louis Globe-Democrat.

The Grain Commission of Kansas at a meeting held on July 25th adopted the following rule: "All purchasers of car-lot grain must accept or reject purchases within forty-eight hours after original inspection is made, and the inspectors of the state of Kansas are forbidden to make re-inspection unless same is called for within forty-eight hours, excepting in cases where it was found impossible to make an inspection of the car or cars for any reason or reasons." The above rule not to apply where there is evidence of cars being "plugged" or otherwise improperly loaded for the purpose of deception. "As far as Kansas is concerned," says Sec'y Smiley, "this will prevent the purchasers of car lots of grain from securing re-inspection of grain on its arrival at the elevator at the expiration of forty-eight hours after the first inspection is made. A week or ten days after first inspection is entirely too long a time for the shipper to be responsible for the condition of grain."

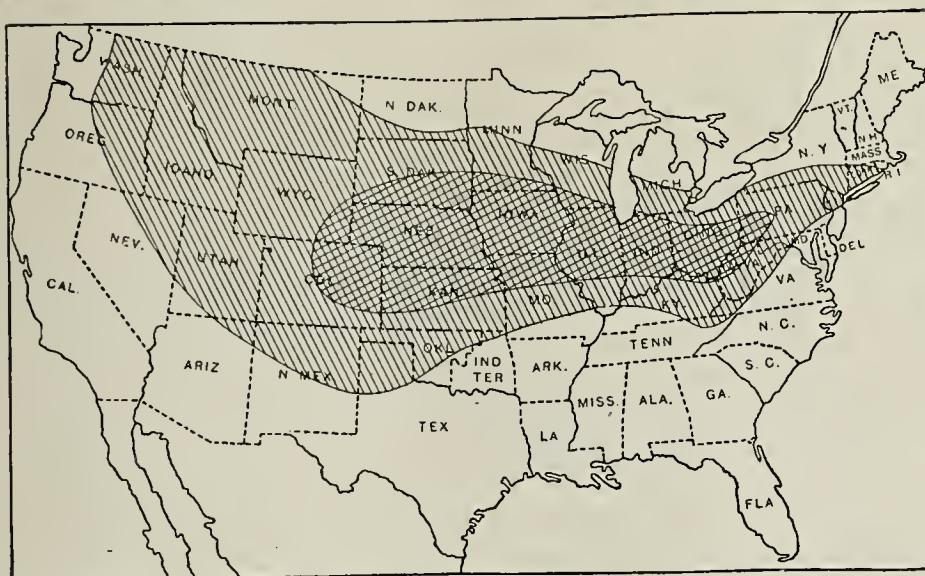


Fig. 4.—Map of the United States, the shaded portion showing the area to which the Sixty-Day and the Kherson oats are adapted. The heavily shaded portion shows the region where the best results are likely to be obtained with these varieties.

nurse crops. Their yield of straw is less than that of most other varieties, so that where a large quantity of roughage is desired this type of oats is not to be recommended. The straw is of excellent quality, however, and is readily eaten by stock.

Less seed can be used than of the large-grained varieties. Seeding at the rate of 2 bushels to the acre is sufficient where 2½ bushels is the ordinary rate.

ADAPTABLE TO VARIOUS SECTIONS.

While neither the Kherson nor the Sixty-Day oat has yet been tested over the entire oat-growing area, they have been distributed widely enough to give a good idea of their adaptability. They probably have a wider range than any other variety. The states where best results may be expected include those of greatest acreage—Pennsylvania, Ohio, Indiana, Illinois, Iowa, Nebraska, northern Kansas and Missouri, southern Wisconsin and Minnesota, South Dakota, and eastern North Dakota. They are particularly to be recommended in Illinois, Iowa, and Nebraska. Indiana reports have been rather unfavorable. Good returns have been obtained under dry-farming conditions in Montana, Wyoming, Colorado, New Mexico, Utah, Idaho, Washington, and Oregon. Where water for irrigation is available some of the larger grained later varieties will usually give heavier yields. This is also true in the northern tier of states, where conditions are more favorable to the late varieties than they are farther south. The map (Fig. 4) shows approximately the sections to which the Sixty-Day and the Kherson oats are adapted. The heavily shaded area shows the district in which these varieties are likely to prove most successful and, in a general way, where they will largely replace other varieties.

CONCLUSIONS.

Their principal defects are the small size and the yellow color of the berry.

Larger, later varieties usually give higher yields in the Northern states and in irrigated districts.

The principal points in their favor are their early

sadors, ministers, consuls, senators, representatives, clerks, doorkeepers and pages, says the New York Journal of Commerce.

Ohio people are all distinguished—in one way or another. Every department of the Government is distinguished—from Governor Harmon down to the Department of Agriculture—with the state legislature in between. But it is the Department of Agriculture of Ohio that has the greatest claim to distinction. It officially proclaims itself unlike any other. The following is an extract from its Official Bulletin for June, published under a state appropriation, and consequently being an official state document. It occupies the leading position in the bulletin and is headed, "White Shirt Jobs":

"A commencement consists of new clothes, new shoes, front seats, music, flowers, hopes, ambitions, oratory and congratulations."

"A diploma is an ornamental, signed statement, certifying that the graduate has gone through the arithmetic. It is silent as to whether the arithmetic went through the graduate."

"If the graduate is ashamed of the hard, rough hands and plain dress of kind and patient parents, then schools and education have made father and mother sad instead of glad."

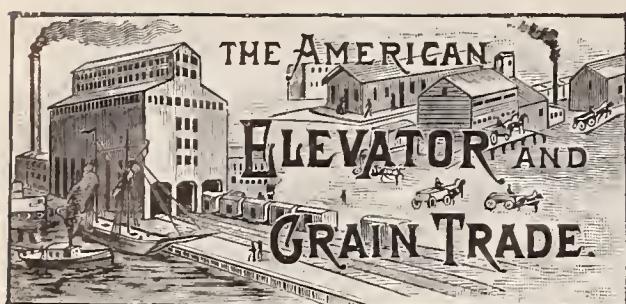
"If a 'white shirt job' is the only thing the graduate will accept it's time to invite the foolkiller to get busy. Do it now."

"If a 'patent leather' position with short hours, good salary and no sweat is the only thing to be thought of, then the graduate has too much egotism and too little capacity. Few people will ever discover his post office."

"Into the district hopper and out of the college spout makes men and women worth while, if embellished with faith, character, energy and common sense."

On the other side of the page was the "Official Report of the Distribution of Live Stock, March 1, 1910."

It is possible that the Ohio Department of Agriculture may at times take itself seriously, although it does not take the state legislature nor the state



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ADVERTISING.

This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching persons connected with this trade. Advertising rates made known upon application.

CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

CHICAGO, AUGUST 15, 1910.

Official Paper of the Grain Dealers' National Association and of the Illinois Grain Dealers' Association.

MAKING CLAIMS.

The Illinois Grain Dealers' Association, through its secretary and attorney for the Claims Department, has sent to its members the wise suggestion that whenever a car of grain is shipped, there should be among the papers sent the receiver a notice that in case of loss in weight of the car exceeding in value \$3, the receiver should, at the shipper's expense, have the certificate of weight sworn to before a notary by the person actually weighing the grain at the terminal. Such an affidavit, made immediately after the shortage is noted, would be the best of evidence in support of a claim.

Let it also be suggested that the shipper should keep at home a carefully made record of every car shipped. This record should include a description of the car, its physical condition, the coopering done thereon and by whom, the details of the weighing and by whom the grain was weighed. This record should be attested by the signatures of all taking part in the weighing and shipping, not necessarily under oath, but for the purpose of enabling those concerned to subsequently make an affidavit intelligently, if it be necessary.

The Illinois officials named no doubt contemplate something of this nature, for they have prepared a blank form of affidavit in support of a claim, in which the statement is made that—at the time of loading said grain, and at the time of leaving the elevator, the said car was well coopered and was not leaking; that the grain doors were properly fixed and no grain was leaking through the same; that the grain loaded into said car at said time weighed lbs.; that the scales over which the same were weighed were scales, in good condition and in good repair; that said scales had been tested on or about the day of A. D. 1910.; that the number of draughts and the weight thereof was as follows:—

The whole art of collecting claims is the ability to prove a loss. The mere statement that

a loss has been sustained is not enough. Therefore, the shipper should treat every car he puts out as subject to possible loss and prepare his documents in advance as though he expected to have a loss and to sustain a claim by affidavit. If no loss results, well and good; but if a loss is incurred, by taking forethought as explained, the entire chain of evidence to support a claim will have been automatically prepared, and no claim agent would dream of holding up or rejecting a claim supported by such documents.

THE HAY CONVENTION.

It makes no difference whether you are or are not a member of the National Hay Association, the officers and all members of that body extend to you a cordial invitation to join them in the forthcoming summer outing and convention to be held at Cedar Point on Lake Erie, near Sandusky, on Tuesday, Wednesday and Thursday, August 23, 24 and 25. The committee in charge of the 1910 convention has made arrangements so that everyone who attends this convention will have an experience he will not easily forget.

The program as arranged by the executive committee contemplates amusements of all sorts for those who attend; for it is the intention of the entertainment committee that everyone in attendance shall go home well pleased with the trip as well as that he shall remember the many things which will be brought up at the business sessions of the convention, held each morning and afternoon.

If, then, you, reader, a hay shipper or dealer, have never attended one of the conventions of the National Hay Association, make it a point to attend the coming one. The rates at the Breakers Hotel are reasonable, and the Association has made special arrangements whereby you can secure a good room at \$1 per day per person, two in a room, or \$1.50 per day one person in a room. Rates for rooms with bath are 50 cents extra per person. These rates are upon the European plan, and you will find several places to eat, at prices to suit your taste and purse. So get out your suit case and make preparation to take in the features of these three interesting and instructive days. If you have a bathing suit, you will need it, because Cedar Point has one of the finest bathing beaches in the world.

THE JULY CORNER.

The worst—and the best—that can be said of our modern newspaper publicity is that any sort of accusation may be made against men or institutions and it is immediately spread over the land with red type sensationalism and accepted by the mass of readers as having all the authority of an established fact; and no matter how false the statement or erroneous the conclusion to be drawn therefrom, the first impression created by flaring head lines can never be recalled or effaced.

The so-called "July wheat corner" in Chicago seems to have been an entirely factitious sensation of this sort, made by the market reporters; and it was in consequence distinguished by being made momentarily a subject of solicitude by the Department of Justice "trust buster." The explanation to a Federal grand jury of the

real inwardness of the July "deal" by Vice-president Merrill, that always sane expounder of exchange mysteries, brought to a sudden stop any disposition of the Department to prosecute somebody on the strength of newspaper accusations of persons forestalling the market; but the publicity given the alleged "corner" has done the Board no particular benefit, in that it created the impression that the wicked Mr. Patten has merely been succeeded by a new "King of the Pit," whom the Board aids and abets in his wickedness as it did Mr. Patten of old. It is pretty hard work keeping the public thinking sound as it relates to the grain exchanges when the market reporters, who ought to know better, encourage the false belief that grain gambling runs riot there.

THE HAY CROP.

Already the country has felt the effect of a short hay crop in the rush of many head of stock to market; and later on there will be another uplift in the retail prices of meat. The dairy men, in their turn, will be crying for more money for milk and butter; and in other ways the pinch of a short hay crop will be reflected in the market places where the masses and the poor consort.

Few people realize what hay means commercially and economically; even the average man who handles hay commercially does so in a sort of apologetic way. West of Michigan we know of no hay associations outside the terminal markets. The National Hay Association is a strong body only because a few strong men have made it what it is by putting their personality into it, not because any proper proportion of the hay handlers of the country support it or think of the hay business as one big enough to take an interest in an association of whose years of hard work they unconsciously reap the benefit from day to day. Hay is made too much of a "side line"; it isn't taken seriously enough for dealers to make all they can out of it or to impress the average farmer with its importance, either as "agriculture's side partner" or as a great commercial commodity *per se*.

If more hay men would take even their own hay business seriously they probably would attend the National Hay Convention and there come into an atmosphere where hay is considered as a great national asset. Then there would be more local hay associations: more hay would be made for the market, and more real prosperity would be brought home to the common people in the way of lower prices on many indispensable foods.

RECIPROCITY WITH CANADA.

The Western farmer in the United States has never benefited much directly from the American protective policy; he has sold in an open market and bought in a protected one. But in the belief that the protective policy has been advantageous to the country in general, he has ordinarily voted for the system—more American low tariff men have come from the protected towns than from the non-protected farms. In the Canadian West, however, the farmers are now clamoring for tariff reform "downward" and reciprocity with the United States, because they feel that protection doesn't

benefit them, whatever it may do for others. During his late tour in the West, Premier Laurier was several times told in so many words that—

There are no trade relations our Government could enter into with any country with better advantages to the farmers of the West than a wider measure of reciprocity toward the United States, including manufactured articles and the natural products of both countries. Such a trade policy would give to the Canadian farmer a cheaper market in which to sell and a cheaper market in which to buy. We have made arrangements to extend our trade with Germany, France, Italy and various small countries, which is all right, but why not make an effort to enlarge our trade with the 90,000,000 of people right at our very doors who offer the best market?

Sir Wilfrid himself, when first given power, nearly a score of years ago, was a low tariff man—an earnest advocate of the very reciprocity that the Canadian farmers now ask for; but so sharply opposed to all wedges of reciprocity have been our senate protectors of the interests involved in the tariff that even Sir Wilfrid has been forced to recognize the fact that reciprocity in Canada is as unpopular now (and on this side the line), except in the Canadian West, as it was popular a generation ago, or until the policy was formally abrogated by the United States. He was therefore entirely consistent, both from a Canadian and from an American protectionist's point of view, when he said at Regina on August 1 that—

I recognize that it would be impossible at one sweep to dispose of the tariff. Changes must be gradual. If you tried to abolish it at once, however oppressive it might be, it would be to create such a disturbance in financial matters as probably to bring on a crisis.

The apology for protection is universally the same—because it is, it must be.

THE BILL OF LADING.

The cotton bill of lading frauds have done more to focus attention on the sloppy method by which negotiable bills of lading are executed than any other one circumstance. So long as Western banks only suffered through frauds made possible by the shiftless manner of issuing grain bills at many stations, Eastern bankers took but casual notice of the evil. But when British bankers gave notice that unless the issue of cotton bills were better protected, they would refuse to handle them, Eastern bankers "got busy," because the elimination of cotton bills would seriously affect foreign exchange and upset the New York bankers' equilibrium.

It is now proposed to accept the suggestion of President Walker of the Rock Island Company, that bills be authenticated by having them stamped by the issuing agent, certifying the physical presence before him for shipment of the commodities named in the bill. Cotton bills have been very largely "accommodation bills," issued by country agents to planters on their request for such bills to be used as collateral for loans, the bills being issued on the planter's statement that ultimately he would deliver from his farm for shipment the stated number of bales. While few frauds have grown directly out of this practice, nevertheless the practice was a loose one that indirectly became responsible for the frauds of which British bankers complained.

Grain bills are not often made in the same way; but the ease with which the manager of the Durant & Elmore Company at Albany ma-

nipulated grain bills to swindle the firm's bankers is sufficient to make it imperative that the making of bills must be better safeguarded in the future if the trade expects bankers to continue to accept the run of grain bills when the original owners of the bills are not everywhere known to be as financially responsible as a one-name maker of negotiable commercial paper. In such an event the bill is accepted as safe on the owner's credit without considering the liability of the carrier. What is now needed is that the manner of issuing bills shall hold the carrier strictly to its liability, by providing that (1) the carrier shall be liable upon bills issued by its agent, although the goods have not been received by him; (2) that the carrier shall be liable on order bills where the goods have been delivered and the bill left outstanding; (3) that altered bills shall be good for their original tenor; and (4) that order bills shall be distinctly differentiated in form from straight bills, so that there may be no mistaking them. This is the purport of the Stevens' bill that passed the lower house at the last session of Congress and is now hung up in the senate awaiting that body's action. It has the bankers' approval.

COOPERAGE CLAIMS.

The allowance of cooperage claims by the Wabash Railroad to Illinois shippers is recognition of the fact that carriers are in duty bound to supply cars in condition to handle the proposed traffic without loss or damage. There is no reason, except usage, that would make it the duty of the shipper to repair a car to put it into condition to contain the shipment, and if he does so, the shipper should be remunerated for his expense.

But shippers have for so many years of the past accepted rolling stock out of condition and patched it up that the railroads have come almost to look upon their habit of supplying such cars as a vested right to do so; and many shippers had apparently fallen into the habit of conceding such right, until the associations began to question it, as they have questioned many other false positions assumed by the carriers, which have inflicted upon shippers a multitude of petty exactions that cost individuals not large sums, perhaps, but which to the trade at large or to the carriers as a whole do amount to a large sum.

The coopering charge is one of these minor exactions that has ceased to be taboo, simply because the Illinois association, having ceased to think of it as a sacred thing, has attacked it as unrighteous and vanquished it. Now, with the Commerce Commission's consent as to the maximum allowance per car that may be made for coopering, shippers will get sound cars or an allowance for making them so.

The seed men and farmers' societies down East are fighting the annual congressional seed donation to the public, some of the agricultural bodies characterizing the distribution as a "veritable nuisance." However, it is betraying no confidence to say that it will be hard to convert Congress to opposition to this particular form of government graft. The statesmen seem to think that a distribution of seeds which cost them nothing makes them solid with the rural districts, and so the appropriation is made year

after year; yet a considerable sum might be saved by the abolition of the donation and the interests of agriculture would not be injured.

CO-OPERATIVE FINESSE.

One may confess to a profound regard for "Reform" and yet plead guilty to a feeling of disappointment when confronted with the reformers. At a safe distance the Reformer has a sort of beatific cast; brought into familiar proximity, he has a way of undecceiving one by the suggestive eloquence of the gold-brick artist or the odor that pervades the neighborhood of the snide jewelry purveyor. There are those Iowa promoters of co-operative concerns, *e. g.*, whose own accounts of their own altruism has dazzled so many of us. For pure unworldliness they frequently obtain special mention—in their own "official organ," published by themselves. It must be "envy, hatred and malice," therefore, that sends out the report from Mason City that a "real war in the ranks of the co-operatives of Iowa has broken out among the officers and stockholders of the Farmers' Brick and Tile Co. [“co-operative,” so called], and that a dozen or more of them with attorneys are hurrying across the continent to Augusta, Maine, to get on the ground floor at the annual meeting held there on August 1: the company is organized under the laws of the state of Maine." It seems to be a scramble to get possession of the management and control of the treasury. The stock, we are told, is owned by the leaders in the farmers' movement in Iowa, and this is the first real declaration of war that has been made,—but, by whom—by the stockholders on the officers or by the officers on the farmer stockholders—we are not told.

It may be all regular in the inner circles of Iowa "co-operatives" to incorporate Iowa companies in Maine; but it must strike the plain and homely farmer who chips in as queer that those who put their dollars into this sort of venture should be compelled to journey twelve hundred miles to Maine in order to have a say in the management of their own company at an annual meeting. Just why this is thus is not very clear. It may occur to the evil-minded that it may be easier to run an Iowa company "right" in Maine, where no inquisitive farmer stockholders can "sass back," than at Mason City where the measley farmer might have a chance to talk out loud in the afternoon and sleep at home at night. Or, perhaps, the incorporation law of Iowa is more particular as to the personal liability of shareholders than that of Maine (we think it is), and that in case of a *faux pas* by the directory operating from Maine resulting in a "busted" company, it might be less annoying to the heavier stockholders, who have many similar irons in the fire, to refer creditors to Augusta and Maine's law than to Mason City and Iowa law.

But this is neither here nor there. When one gets keyed up watching these star reformers cavort after the "high C," it is disconcerting to have the expected happen—a "flat" at the critical moment, when the exalted altruism of the "Journal" degenerates into the sordid chasing by its owners after pelf by the Maine route just like common-trash "high financiers" who chase themselves into far away states to avoid their unruly shareholders.

EDITORIAL MENTION

The National Industrial Traffic League is still fighting "natural shrinkage" in the claim departments, wherever that little joke still finds a lodgment.

The corn crop looks pretty good now. It looked very good early last fall; but some of the dealers who had sold it all by October for winter delivery were quite sorry some weeks later that they were so precipitate.

Don't abuse your commission man's good nature and patience by over-drawing. Be reasonable; leave a margin, and your consignee will have more respect for you personally and for your ability as a responsible business man.

The handlers of winter wheat are again and again reminded that they are often guilty of paying too much for off-grades and that they would do well to study the price list of that kind of grain. Off-grade stuff is sold on its merits, and discounts are often very heavy.

The Commerce Commission, in a ruling handed down on July 18, holds that it has "exclusive jurisdiction over claims for damages arising from misrouting of freight." If the order means literally what it says, the red-tape involved in collecting a claim of that sort will be materially increased.

If shippers would tag their cars with a card showing number of bushels and expected grade of the grain it contains, it would be a notification of possible error at arrival if the car should run short or miss grade. The production of the cards by the local printer is so inexpensive that their use would probably be very profitable.

A Red Oak, Ia., farmer who sold supposititious seed corn to his neighbor, claiming it to be high grade and well tested, when it was not and he knew it was not, was, on July 29, fined \$100 and costs. The defendant has prayed an appeal; but it's a safe wager he won't "monkey with that kind of a buzzsaw" a second time. The court merits special mention for discouraging swindling of this sort.

On result of too much faith in the early crop killer's dictum is seen in the Southwest, where heavy mixtures of wheat with oats tell the tale of volunteer wheat in spring planted oats, and remind us that it is a very common observation that the recuperative power of nature is more to be relied on than the crop expert's judgment passed soon after the winter breaks up and spring is supposed to start in but doesn't.

The explanation of German rye and oats exports is given in another column. The profit to the shippers of the grain in Germany is paid out of the German treasury. It does not appear that the people of Germany gain any benefit from the arrangement, although the shipping interests which support the queer law undoubtedly make a good thing out of it. German grain men supply other countries with rye at a

price below the home price and the German people pay them for robbing themselves of the grain that should make cheap bread for home use. But as it is Germany herself has bread prices, to the consumer, as high as, if not higher than, any country in Europe.

Velvet chaff wheat has at last broken into good company, and hereafter in Minnesota will pass as "Northern." The state inspection authorities say the variety has improved so much that milling and baking tests justify this elevation in rank. As there are said to be sixty million bushels of the variety this year, one may well wonder whether the Velvet Chaff has so much "improved" or the rest of the wheat of the state has descended to its level.

It may interest those concerned in the conservation of American soils and natural resources to know that in the year ended June 30, 1910, the miners of rock phosphate exported \$7,454,694 worth, making the total exported in the past three years the large sum of \$24,968,169. One may wonder how much more grain Illinois dealers might have handled if that amount of phosphate had been spread over our soils instead of those of Europe.

The Western Grain Dealers' Association will begin suit at Sibley, Ia., against the C. St. P. M. & O. Ry. in October to test the question of the carriers' liability for loss to shippers by delays in transit. We imagine the association will have little trouble in establishing such liability. The more difficult matter will be for shippers who may have suffered such losses to establish their claims, owing to the faulty record keeping that obtains in so many country grain offices.

The Reform newspapers of Chicago are after Inspector Cowen in the character of collector of campaign funds. Mr. Cowen pleads guilty to acting as accessory; but he denies that any of his employes are required to contribute as a condition precedent to holding their jobs, and that is no doubt the case. Moreover, Mr. Cowen's frankness in the matter is so widely at variance with the denial expected from him and his subordinates by the newspapers (who thus were deprived of a sensation), that whether one approves the collection or not, he must still retain his respect for the man and his honesty.

Among several "stray" cars received on the inspection tracks at Kansas City, Kan., one day in July there were three consigned to (1) "Hold Kansas City," (2) "El Reno, Kansas City," and (3) "Oklahoma Express, Kansas City." "Only this, and nothing more," as quoth the raven. On the same day, in the same market, there arrived more than forty cars of wheat consigned to the shippers thereof, without orders to notify anyone. These naturally had to be held until the shipper could be notified by the grain inspector for shipping instructions obtained by mail, with the certainty that during this interval demurrage would begin. The inspector's chief clerk explains that these "strays" are farmers' shipments, who do not know

enough of business to consign to some one to look after the grain on its arrival. Doubtless he is right; because farmers are suspicious of "middlemen," and rather expect a state officer, who really has no time, talent or duty in the matter, to undertake the commission man's duty for them, so far as looking after the car is concerned. But are farmers the only careless shippers?

The Merchants' Exchange of St. Louis has finally succeeded in securing a city ordinance that permits a reduction of the weighing fees on the team track scales in that city and in putting that weighing under the supervision of the officers of the Exchange. This matter, of great benefit to the shipping public, has been pending a long time; and the Exchange deserves credit for its persistence in forcing the ordinance to a passage in spite of delays and many discouragements.

King & Co., Toledo, again remind shippers that in order to avoid delays at the receiving end, with demurrage costs and other annoyances, they should direct their bankers to send drafts directly to the original consignor's bank, when known, or to the banks in consignees' towns. "Some banks send them on a merry-go-round through different cities, drafts reaching the proper place only after the grain does." As the railroads will not deliver or move grain from one road to another without surrender of the bill of lading, papers should arrive in advance.

When Kansas farmers "stopped signing lightning rod contracts and began applying the acid test to gold bricks," they are assumed to have reached such a height of business acumen as to become a beacon light for human kind generally. But the Kansas farmer, in outlawing the lightning rod with the swindling lightning rod man, overdid the job, as Kansas men frequently do. And so many good farms and valuable grain elevators and other kinds of costly structures and much personal property have thereby gone up in smoke for lack of a true discrimination in buying. When Kansans—and others—return to common sense in this lightning rod business and put up rods again, there will be fewer elevators and isolated farm buildings destroyed for want of that protection which a scientifically constructed rod will afford.

The Commerce Commission's suspension of all advances in freight rates for 120 days from July 14, with the accompanying order for the roads to show more valid reasons for the proposed increases than their complaint that they "need the money," has impressed the country with the Commission's belief that if the increases are allowed they will have to be justified. In the first place, the roads will be required, by public opinion at least, to show that they will improve the service in proportion to the rate advance they ask. All rate advances, of course, fall on the producer and the consumer and so are not to be lightly considered, even by the middleman, the grain dealer, say, who suffers most from poor service and is not as a business man otherwise interested in the rate, if he can get the service; but since poor service

reflects adversely on both the producer and the consumer, as well as upon the business of the middleman, the Commission should insist, before any rate advance is sanctioned, that guarantees of better service shall be forthcoming.

"Keep your eye on Pittsburg." She is likely to send the banner delegation to the big hay convention at Cedar Point next week. The official badge of this bunch and their souvenirs are expected to be the eye-openers of the convention.

The farmers of Indiana are next on the list for exploitation in a co-operative way; and the "gentlemanly agent" is now passing "around the seats" in some localities selling stock like pink lemonade to "enterprising farmers" who want to do away with "the middleman" and incidentally accumulate some experience of the gold-brick sort on their own account.

The connecting link uniting the Chicago Sanitary Canal and the Illinois and Michigan Canal at Lockport, Ill., was formally thrown open for navigation by Acting Chief Engineer C. R. Dart on July 25. This gives a navigable channel for 200-ton barges (if not too deeply loaded) from Chicago to the Gulf; and a little money spent now in dredging west of Joliet would make the old I. & M. Canal as good as ever it was.

See'y Bigelow had a rather peculiar experience the other day, when a Topeka man telegraphed to him for the names of all firms in that market "long" on "Sep." wheat or oats. When Mr. Bigelow replied that he could not tell if he would and would not if he could, his correspondent replied: "Will see if the Attorney General of the United States can make you answer my question." And now all the speculative world is holding its breath wondering what the man can mean.

In one of his communications to the members of the Kentucky Millers' Associations, the Secretary reminded them that the loss in handling Kentucky wheat will be large this year, owing to the unusual amount of moisture it carries, due to the heavy rains at harvest. He says a drier will be a losing proposition unless the price of wet wheat is cut enough to allow for shrinkage, which he maintains is not less than 25 cents per bushel. This is of course a self-evident proposition, but the very warning is evidence that the Secretary expects that many handlers of wheat will ignore so patent a truth.

If anyone imagined that the Canadian farmers in the West were simply playing wind politics in their demand for government ownership and operation of elevators, that one must by now be thoroughly disabused of his error. The "Canuck" is a voter, and he knows how to use his ballot as a club of the real "Big Stick" class. It doesn't so much matter to him that his public elevator policy is right, as that he thinks he wants it, and as the Canadian professional politician has rather more, than less, of the failings, in and out of office, of his American congeners, when the Western farmer demands a persimmon, he gets a persimmon, whether

persimmons are ripe or plenty or not. And so it is not a hazardous prediction now, that within a few short years the private elevator in western Canada will have passed away and the treasury of the Dominion will pay the biggest part of the expenses of marketing the Canadian farmer's grain.

Prof. Holden estimates the damage to Iowa corn from the corn root worms this season at \$20,000,000; which is no small contribution for the maintenance of an apparently useless, but noxious worm. How much the other corn states damaged in the same way is not known or estimated, but no doubt it is a very large sum. Indeed, the more one thinks of it, the more one must agree with Lafeadio Hearn that the insect world is the most marvelous of created things and apparently the most expensive, considering their services to animate creation.

Do you know that 31 per cent of the elevator fires are from "cause unknown" and that such losses absorb 47 percent of the total amount of indemnity paid? Now it is equally interesting to know, as the secretary of the Michigan Millers' Mutual Fire Insurance Co. tells us, that a careful analysis of the proofs made in more than 600 cases practically reduces these "unknowns," or 90 percent of them, to seven assignable causes, to wit: hot box, locomotive sparks, defective wiring, matches, bad chimneys, wood too near the boiler or stack, and tramps. Against all of these save the last, perhaps, every owner has the protective remedy in his own hands. He has only to take pains—guard his premises as carefully as he looks out for the pocket-book he has in daily use; and even from tramps he may be reasonably secure by keeping the premises locked and by having no places about him that may be used as natural harborage. A proper roof of composition or metal is a complete remedy ordinarily for locomotive sparks.

All things considered, in spite of the crop killers' worst, there probably never was a year when the American grain dealer has had more to do than he will have to do from now on until another crop is ready for distribution from the farms among the consumers. Wheat is a 670-million-bushel crop; oats have broken all records and corn may still do so—only hay is really short. What more may the dealer ask? If he does not make money on the crop of 1910, it will be the grain dealer's own fault. He has only to do business carefully and patiently and thoughtfully to make all the money this year that his facilities warrant his making. A man at a 100,000-bu. station ought not to expect to make the profit of a 200,000-bu. station; and when he tries to do it he generally makes a failure. There is nothing so useful in business as the contented mind. We don't mean the stagnant mind, but the ability to get everything possible out of one's situation and to be content with that where one is, remembering that when one wants to do more he must move to a wider field or develop his own field naturally. The lesson of the corn crop of 1909 ought not to be forgotten. The losses sustained on that crop were distinctly those of the man who overreaches—the man who would

get rich quick in a situation where that would be impossible in any event. As the crop did not fulfill the early promises, the ambitious forward seller who saw immense paper profits in October was very often cruelly deceived. The present season may tempt one to similar folly, except that his impatience to handle unpicked corn ought to be restrained by his enforced activity with oats which he did not experience a year ago.

Frank G. Crowell of Kansas City is another American traveler who fears the effect on American farms of the competition of the Yellow Man's labor in Asia. We think the fear is one founded largely on appearances—on a superficial condition. It is not, of course, a complete answer to say that what never has been, never will be; but the fact that Asia has never sent wheat abroad in any considerable quantity or used it at home largely is a pretty good reason not to greatly fear its exportation in the near future. Asiatics do not change their habits nearly so fast as Occidentals, although they are most expert imitators. But Mr. Crowell's apprehension that the soy bean, raised so largely in China and Manchuria, may radically affect corn shipments from this country to Europe for feeding purposes is not without justification. The soy bean is a natural product of the Far East; it has long been imbedded in the Chinaman's agricultural system. He has only to enlarge his production, not change its character, as with wheat on a large scale, to enter the export trade; and Europe stands ready to take all he will send. For the soy bean is first of all a great oil producer, with great feeding value after the oil is removed, and it has become very popular in western Europe for those reasons. The way to get around the soy bean is to "fight fire with fire"—encourage its culture more largely in this country.

The proposed conference of railway commissioners of the United States and Canada, looking to co-operation in the adjustment of rates on international business seems like a logical step forward. Commerce and trade prosper most when conditions are as normal as possible—when legal interferences or subterfuges are few and inconsequential. Therefore, as long as we must needs control the carriers by railway laws on both sides the international boundary, it would seem a proper thing to have the execution of those laws (which are to all intents and purposes similar—certainly in aim and purpose) made by co-operation as uniform and innocuous as possible. Then the grain, let us say, that should naturally move to consumption through Canada would do so, and similarly grain would go through American channels when the current naturally moves by that route; yet by a manipulation of rates, in the absence of legal control, at this moment we see the anomaly of grain from our own Southwest going abroad *via* lake-and-rail through Montreal instead of *via* New Orleans or Galveston, the natural outlets. We are not prepared to say that this fact involves any economic loss to the ultimate consumer; but it certainly is disconcerting to business men who are not in a position to take advantage of what, under the circumstances, are essentially "manipulated rates."

TRADE NOTES

The Provost Improved Grain Drier Co. has been incorporated at Milwaukee, Wis., with a capital of \$25,000. The incorporators are Peter Provost, J. L. Furstenberg, John C. Kleist.

"Know Dixon's Flake Graphite from Personal Experience. It saves time, trouble—yes, and reputation," from *Graphite* for July published by Joseph Dixon Crucible Co., Jersey City, N. J.

The Milwaukee Vinegar Company of Milwaukee, Wis., has contracted with Moulton & Evans of Minneapolis to build a fire proof grain elevator at Cudahy, Wis. The storage tanks will be built of brick with concrete foundation and tile roof.

The Weller Mfg. Co. of Chicago invites the trade who have not received their 19B supplement to catalogue No. 19 to send for same. It is effective July 1, 1910, and gives revised lists governing Salem Buckets, Rubber Belting, Wire Rope, Steam and Brewers' Hose and Cotton Fire Hose.

The Prinz & Rau Manufacturing Company of Milwaukee, Wis., has bought 100 feet frontage on East Water Street in that city, opposite its plant, but announcement is made that the purchase was made simply as an investment with no special reference that an addition is to be made to the plant at the present time.

The C. O. Bartlett & Snow Company of Cleveland, Ohio, manufacturers of elevating and conveying machinery, recently leased the property on Columbus street vacated by the McMyler Manufacturing Company. The floor space acquired is 76,000 square feet, and the company will begin the operation of the plant at once.

In their wall calendar for August the S. Howes Company of Silver Creek, N. Y., publish a handsome representation of their "Eureka" Counterbalanced Corn and Cob Separator and Cleaner with self cleaning screens, for separating corn and cob and cleaning the corn as it comes from the sheller. These calendars will be mailed on request.

After running constantly 24 hours a day for the last 10 months the Foos Gas Engine Co., Springfield, O., is considering the advisability of building a large addition to relieve the congestion in its factory. The popularity of Foos engines for grain elevator use has had a rapid growth since the manufacturers demonstrated its economical efficiency as compared with any other kind of power.

Not everybody knows that the Charter Gas Engine Co. of Sterling, Ill., has a ball team, so fans take notice. That the team plays good ball is shown by the fact that at a recent game with the Russell, Burdsall & Ward team the score at the finish stood 5 to 3 in favor of the Charters. Men who make good engines can also probably play good ball. They are members of the Manufacturers' league of Sterling and a great deal of interest is shown in their Saturday games.

The W. E. Dee Company of Chicago commences an advertisement in this issue of their sewer pipe and drain tile. The company offers unusual facilities to handlers of their goods. They are centrally located, convenient to all railroads and have four large plants fully equipped with the latest and newest machinery and appliances for manufacturing all clay products. They have the largest output in the West and can make prompt shipments on large or small orders.

The National Automatic Scale Company of Bloomington, Ill., desires to have it known in order to overcome prejudice that the National Automatic Scale is not and never was in any way shape or form similar to the extinct McLeod Scale. The company took over the machinery of the McLeod Company and occupies its former quarters but there is no similarity between the two. Mr. J. P. Johnson, sales manager for the company, has just returned from his wedding trip in which the main points of interest visited were the millers' convention at St. Louis, and a two weeks' stay at Minneapolis in the interests of the scale and several

days visiting the trade in Chicago. He reports a constantly growing interest in the National Scale in each section visited.

The Jeffrey Manufacturing Company, Main Office and Works, Columbus, Ohio, are changing the location of their Denver office from No. 1711 Tremont place, and after August 1 will occupy a commodious suite of rooms in the First National Bank building. This company besides maintaining a large selling force in over a dozen of the leading cities of this country, also maintain a corps of engineers at their branch offices situated in the following cities: Chicago, St. Louis, Denver, Montreal, Pittsburg, Charleston, W. Va., Boston, New York and Birmingham. There are also nearly 100 Jeffrey agencies in additional cities in this country and abroad.

The latest publication from Stephens-Adamson Manufacturing Company of Aurora, Ill., is a small illustrated booklet on "Modern Progress in Labor-Saving and Coal Handling Machinery." There has been a very large and constantly increasing demand for machinery of the Stephens-Adamson manufacture and the number of plants is rapidly increasing which has its machinery stamped with the "S-A" make. The booklet contains descriptions of the "S-A" belt conveyors, guide rollers, belt conveyor trippers and the Sheldon pivot bar which is

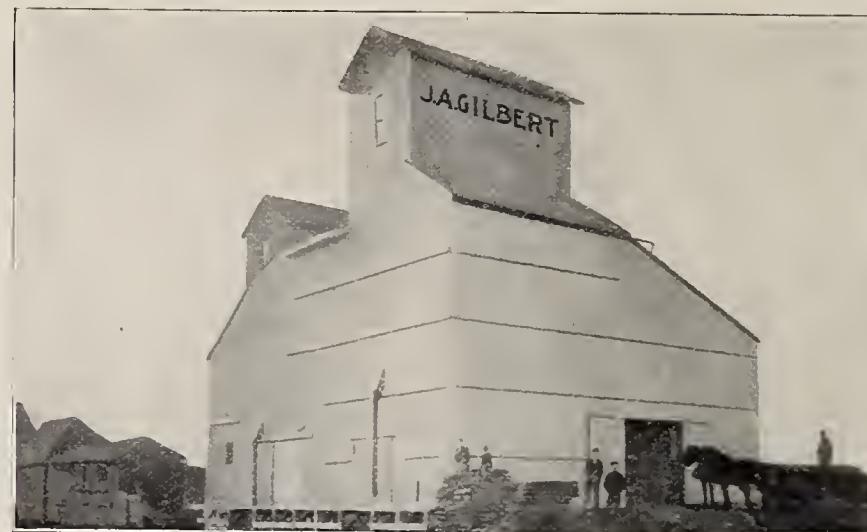
that it speaks well for the careful and conservative management of your company that you had re-insurance in part in six different solvent companies, and I think this gives strong evidence to any unprejudiced mind of the careful management of your company. I am more than satisfied that mutual insurance is the right system, and you can depend on a full line of insurance from me.

A GOOD NEBRASKA ELEVATOR.

Waco, Nebr., is one of the minor market towns of York County, in that rich country in southeastern Nebraska, south of the Platte River, whose generous crops of corn and oats particularly have made "The Burlington" one of the greatest grain carriers on the continent. J. A. Gilbert is one of two buyers here, and owns the house shown in the picture. It tells its own story of growth and good business management.

The original building is 52x22 feet in size with 30-ft. posts. It has a 10-ft. driveway, two dumps, a hopper scale, two loft legs and two fans. The power is a 10-h.p. Howe Gasoline Engine, and it is ample. The addition, seen on the left, is 14x52 ft. in size with 20-ft. posts. The two buildings give a total storage capacity of 35,000 bus.

Mr. Gilbert has long handled coal in connection



J. A. GILBERT'S GRAIN ELEVATOR, AT WACO, NEBR.

claimed to be the most popular car mover on the market.

The Ellis Drier Company of Chicago has just issued a very handsome catalogue, showing various installations of the Ellis Drier and demonstrating that Ellis dried is nature's nearest way. The illustrations are excellent, large halftones and the work of the printer is artistic throughout in eleven pages which comprise the book. Every grain dealer whether he is in the market for a grain drier or not will find it worth while to ask for and read the statements set forth in the catalogue about grain drying.

The St. Mary's Machine Co., of St. Mary's, Ohio, in a small pamphlet recently received, give a number of points to consider in the purchase of a gas engine. They refer to the St. Mary's semi-automatic gas and gasoline engine and explain why this engine has grown so popular with power users during the past few years. Their Standard Engines are built from 2 to 70 horse power, single cylinder; the Duplex Engines from 60 to 150 horse power; and the Portable Engines mounted on steel, or wood trucks, from 4 to 40 horse power.

That mutual fire insurance is in all respects satisfactory is shown by the accompanying letter sent by Martin Lauer, dealer in hardware and agricultural implements at Ida Grove, Iowa, to F. D. Babcock, secretary of the Grain Shippers' Mutual Fire Insurance Association of Ida Grove, Iowa:

Dear Sir:—I think it will be no more than right that I should thank you for the prompt and fair adjustment made by Mr. D. M. Grove in my recent loss by fire and for your prompt payment of \$6,050.95, being the full amount of your share of the loss under six different policies. I might say

with his grain business and about two years ago he added a line of lumber also, and has found it quite profitable.

The average grain crop yield per acre in Ohio has been gradually but surely decreasing. The entire 1910 Ohio wheat crop will be required to pay the cost of the two battleships just ordered by Congress.—A. P. Sandles.

The first steps toward organizing a grain and produce exchange in Stockton, Calif., were taken on July 22, when a large number of grain men, commission men and produce dealers held a session and decided to establish such an institution. Committees were named to work out the details.

The harvester's union strike in the wheat field near Walla Walla was a failure. Those who disturbed the peace were promptly arrested and fined, while the farmers refused to employ men wearing the Union's red ribbon.

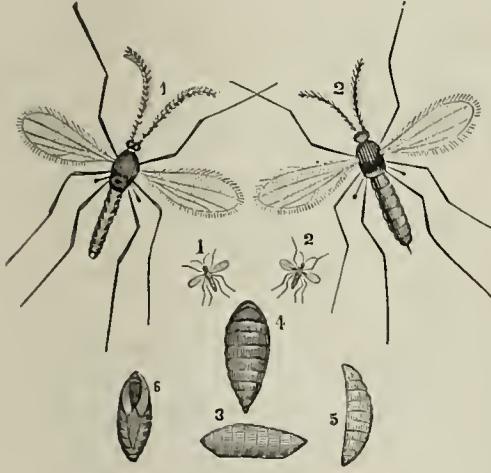
Another record in grain cargoes has been made, the Midland Prince having sailed from Fort William recently with 523,251 bushels of oats, shipped by the Canadian Elevator Co. This is the record cargo in bushels on the lakes.

Benj. L. Purcell of the Food and Dairy Department of Virginia has advised the grain committee of the New York Board of Trade that large quantities of damaged corn are going into the state, and that while some of it is being fed stock other lots are being made into cornmeal for human consumption; and he suggested that some steps be taken to advise his department of receipts of shipments of corn when they do not grade, and that action will be taken against the shipper.

PREVENTING ATTACKS OF THE HESSIAN FLY.

The following information, published by Professor Troop, entomologist of the Purdue University Experiment Station, in regard to the Hessian fly, contains suggestions which should be of value to every miller. For his own welfare the country miller should "pass along" Professor Troop's ideas to the farmers in his section. The bulletin says:

"Starting with the wheat crop, the flies make their appearance from the middle of August to the forepart of September, laying their eggs upon the leaves of the young wheat plants as they come up. These eggs hatch in a few days and the larvae work their way down the inside of the sheath of the leaf to the first joint. Here they absorb the juices from the plant, taking but very little, if any, of their food through the mouth. They remain here until cold weather, when they change to what is known as the flaxseed stage, which is really a semi-pupa stage in which they pass the winter, changing to



THE HESSIAN FLY.

1—Male, natural size and magnified. 2—Female, natural size and magnified. 3—Larva, magnified. 4 and 6—Pupa, magnified. 5—Larva, lateral view.—After Forbes.

the pupa in the spring, the adult fly coming out as soon as warm weather comes.

"The same process is gone through in the spring, but as the wheat stem is growing now, they will go down to the second or perhaps the third joint, some of them possibly going down to the first joint, depending on which leaf the eggs are laid. Here they absorb the juice from the stem, causing it to rot off and by the time the head is well formed, the straw is so weak that it is unable to hold up the head and it falls over. The injury to the grain, therefore, you will see, is due to the sucking or absorption of the sap from the straw, thereby preventing the grain from filling out.

"In order to prevent the attacks of the fly, we recommend that the main crop be not sowed earlier than Sept. 25. As the flies make their appearance early, a trap strip is sowed around the field the latter part of August. This gives ample opportunity for the flies to deposit their eggs in this trap strip, then just before the main crop is sowed this strip is plowed under as deeply as possible, rolled down, and the whole field may then be sowed. This method has given us almost perfect immunity from the fly, even in seasons when it was very abundant."

The students at Manhattan, Kan., harvested the valuable plots of test-wheat with sickles in order to avoid loss of any part of the grain.

The oats outlook in the Northwest in June and July was so unfavorable that many Minnesota and Wisconsin farmers became buyers of old oats to store for winter use.

The first car of this year's winter wheat crop to be received in Minneapolis arrived on July 13 from Pond, Okla. The Sterling Elevator Co., to whom the car was consigned, sold it for \$1.10 per bushel. The quality of the grain was excellent.

It is reported from Springfield that the action of the Board of Trade of Cairo, Ill., in appointing W. S. Powell of that place grain inspector, the appointment effective August 1, will be the subject of investigation by the Railroad and Warehouse Commission.

RECEIPTS AND SHIPMENTS.

Following are the receipts and shipments of grain etc., at leading receiving and shipping points in the United States for the month of July, 1910:

BALTIMORE—Reported by James B. Hessong, Secretary of the Chamber of Commerce.

Articles	Receipts		Shipments	
	1910	1909	1910	1909
Wheat, bushels.....	1,364,819	1,145,000	72,480	672,000
Corn, bushels.....	209,424	163,395	90,794	17,979
Oats, bushels.....	162,736	219,770	140	160
Barley, bushels.....	2,128	487	.....	.....
Rye, bushels.....	8,185	81,958	.....	30,000
Timothy Seed, lbs.....	.....	593	169	.....
Hay, tons.....	4,904	4,408	975	1,298
Flour, barrels.....	126,043	91,028	27,017	25,112

BOSTON—Reported by James A. McKibben, Secretary of the Chamber of Commerce.

Articles	Receipts		Shipments	
	1910	1909	1910	1909
Flour, barrels.....	115,916	97,837	27,317	19,681
Wheat, bushels.....	4,477	4,840	109,621	105,837
Corn, bushels.....	37,385	98,495	18,951	5,240
Oats, bushels.....	257,492	306,553	27,980	.....
Rye, bushels.....	4,815	.....	.....	.....
Barley, bushels.....	2,540	4,688	.....	.....
Flaxseed, bushels.....	.....	2,550	.....	.....
Peas, bushels.....	.....	.....	.....	.....
Millfeed, tons.....	1,696	1,928	205	5
Corn Meal, barrels.....	2,125	720	205	.....
Oat Meal, cases.....	28,329	16,380	31,428	18,825
Oat Meal, sacks.....	2,430	3,332	1,200	2,500
Hay, tons.....	7,820	12,150	512	535

CHICAGO—Reported by George F. Stone, Secretary of the Board of Trade.

Articles	Receipts		Shipments	
	1910	1909	1910	1909
Wheat, bushels.....	2,662,400	4,539,050	1,507,300	1,538,952
Corn, bushels.....	6,029,800	6,513,900	6,168,350	5,399,299
Oats, bushels.....	6,352,200	4,007,260	5,117,700	5,855,477
Barley, bushels.....	1,276,500	1,202,200	432,500	369,632
Rye, bushels.....	40,503	61,000	13,900	49,758
Timothy Seed, lbs.....	890,300	574,670	452,100	248,100
Clover Seed, lbs.....	30,000	129,835	4,100	90,756
Other Grass Seeds, lbs.....	706,500	199,200	939,400	712,147
Flax Seed, bushels.....	13,000	23,000	17,300	.....
Broom Corn, lbs.....	471,100	196,600	251,120	231,469
Hay, tons.....	18,768	21,435	1,119	883
Flour, barrels.....	501,721	508,424	486,574	493,035

CINCINNATI—Reported by C. B. Murray, Superintendent of the Chamber of Commerce.

Articles	Receipts		Shipments	
	1910	1909	1910	1909
Wheat, bushels.....	154,584	271,113	153,418	96,884
Corn, bushels.....	618,853	416,178	496,812	293,126
Oats, bushels.....	378,535	398,500	215,674	141,854
Barley, bushels.....	42,300	11,000	3,000	1,000
Rye, bushels.....	20,100	7,864	2,129	4,048
Malt, bushels.....	132,000	213,220	37,500	55,620
Timothy Seed, bgs.....	1,071	61	2,441	1,203
Clover Seed, bgs.....	256	680	1,501	1,298
Other Grass Seed, bgs.....	4,756	5,904	7,968	5,315
Hay, tons.....	10,164	9,007	8,405	6,310
Flour, bbls.....	72,666	83,379	45,646	51,773

DULUTH—Reported by Chas. F. MacDonald, Secretary of the Board of Trade.

Articles	Receipts		Shipments	
	1910	1909	1910	1909
Wheat, bushels.....	1,518,482	624,819	1,684,533	2,924,248
Corn, bushels.....	51,135	167,948	196,046	268,148
Oats, bushels.....	185,475	257,920	925,962	360,315
Barley, bushels.....	632,876	287,653	504,238	333,545
Rye, bushels.....	5,031	3,382	53,100	1,382
Flax Seed, bushels.....	179,112	331,127	151,394	350,857
Flour, bbls.....	509,340	639,300	609,530	723,155
Flour, bbls., Production.....	75,245	51,410	.....	.....

KANSAS CITY, MO.—Reported by E. D. Bigelow, Secretary of the Board of Trade.

Articles	Receipts		Shipments	
	1910	1909	1910	1909
Wheat, bushels.....	7,569,600	5,221,700	3,798,000	2,239,600
Corn, bushels.....	1,240,800	1,043,050	1,423,200	959,100
Oats, bushels.....	423,300	339,000	180,200	181,500
Barley, bushels.....	5,600	1,100	8,400	.....
Rye, bushels.....	1,100	4,400	.....	2,200
Bran, bushels.....	.....	.....	.....	.....
Flax Seed, bushels.....
Hay, tons.....	21,030	14,100	8,100	1,500
Flour, barrels.....	2,000	5,500	127,500	132,500

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ELEVATOR AND GRAIN NEWS

MINNESOTA AND WISCONSIN.

The O. & M. Elevator at Lowry, Minn., has undergone repairs.

A concrete foundation has been laid under the elevator at Meriden, Minn.

Construction work will be commenced at once on the elevator at Wilson, Wis.

The elevator for August Holzheimer in Holloway, Minn., is nearing completion.

Arthur J. Wilson has purchased the Amenia Elevator in West Concord, Minn.

The warehouse for the Cargill Company in New London, Wis., is now under roof.

G. A. Swan of Minneapolis has purchased the Cargill Elevator in Alden, Minn.

J. C. Machens of Machens, St. Charles county, Mo., has installed a National Scale.

The Western Elevator Co. commenced operations in its elevator at Boyd, Wis., August 1.

The elevator of A. C. Anderson at Hope, Steele county, Minn., has undergone repairs.

Victor H. Smith has purchased the property of the Victoria Elevator Co. in Hector, Minn.

The Chandler Farmers' Elevator Co., of Chandler, Minn., has been incorporated with \$10,000 capital.

The Pennock Farmers' Elevator Co. of Pennock, Minn., is installing a Hall Signaling Distributor.

A. Mr. Hobe of Minneapolis has been endeavoring to organize an elevator company in Easton, Minn.

The additions and repairs to the Columbia Elevator Co.'s plant in Hector, Minn., have been completed.

The Raymond Farmers' Elevator Co., of Raymond, Minn., has been incorporated with \$20,000 capital.

The Provost Improved Grain Dryers' Co., of Milwaukee, Wis., has been incorporated with \$25,000 capital.

The Pioneer Steel Elevator Co., of Minneapolis has increased its capital stock from \$250,000 to \$275,000.

The Cargill Elevator at Mankato, Minn., has closed permanently and the structure will probably be razed.

The property of the State Elevator Co. at Silver Lake, Minn., has been purchased by an organization of farmers.

The Great Western Elevator Co. is rebuilding an elevator on the site of the Security Elevator in Morton, Minn.

Ross, Knuteson and Tennes, who purchased the Reinhardt Elevator in Bird Island, Minn., recently, are now in possession.

The elevator for William Hoffman at Renville, Minn., to replace the structure recently destroyed by fire, has been completed.

The Northwestern Elevator at Clara City, Minn., will close permanently this fall because there are four other elevators in the town.

The Diemer-Pepper Elevator Co. of Bagley, Minn., will erect an elevator at Gonvick, Clearwater county, Minn., and at another point in the state.

The Maribel Grain Co., of Maribel, Manitowoc county, Wis., has been incorporated with \$7,500 capital by William Buth, Joseph A. Kellner and others.

J. A. Freestoue has sold the old Northern Grain Co. elevator at Colfax, Wis., to T. E. Thompson, and has purchased the J. D. Burns elevator at that place.

It is likely that a co-operative elevator company will be organized at Clearbrook, near Bagley, Minn., and a 20,000-bushel elevator to cost \$4,000 erected.

The Iona Farmers' Elevator Co. of Iona, Minn., has been incorporated with \$25,000 capital by T. F. Rieman, William Kappes, P. S. Culhane and others.

The Globe Terminal Elevators of the Peavy Co., at Superior, Wis., will not be opened for business this season on account of the short North Dakota crop.

The Cargill Elevator at Long Prairie, Minn., has closed owing to the small amount of grain marketed there, but the Stedman Elevator will continue to operate.

The Brooks Elevator Co., of Minneapolis (Northern Pacific R. R.) has purchased a "National" Bagging Scale, portable, to replace the Richardson bagger that had seen better days.

The Tri-State Terminal Elevator Association has decided to make no further effort to establish terminal elevators in Minneapolis and Duluth, Minn., until stock shall have been fully subscribed.

The Moulton & Evans Co., of Minneapolis, Minn., has been awarded the contract to erect a brick, concrete and tile elevator of 50,000 bushels capacity

and to cost \$15,000 for the Milwaukee Vinegar Co., at Cudahy, Wis. The elevator will be completed in October.

The Mondovi Equity Exchange has purchased from the Western Elevator Co. the elevator of the Northern Grain Co., in Mondovi, Wis., for \$2,500. The Exchange has incorporated with \$20,000 capital.

ILLINOIS.

Miles W. Smith has purchased the Buckley-Purley Elevator in Cuba, Ill.

H. W. Caldwell & Son Co. recently purchased two Hall Signaling Distributors.

The work of tearing down the North Elevator in Lena, Ill., has been completed.

The Couch Elevator at West Salem, Ill., has been completed and is now in operation.

John Fryer has sold his elevator at Harness, Logan county, Ill., to John Weimer.

The Weller Manufacturing Co., of Chicago, has purchased two Hall Signaling Distributors.

E. B. Armstrong has sold his elevator at Tolono, Ill., to Henry Schulenberg of Huntington, Ind.

The Burrell Manufacturing Co., of Bradley, Ill., has purchased two Hall Signaling Distributors.

The Halliday Elevator Co., of Cairo, Ill., has increased its capital stock from \$80,000 to \$100,000.

The Farmers' Grain Co. of Illiopolis, Ill., has increased its capital stock from \$10,000 to \$20,000.

The new elevator at Roseburg, Ill., is now receiving grain, although it has not yet been completed.

Frank Supple is building an office and scale house for his elevator at Twin Grove, McLean county, Ill.

The work of moving the elevator of the Virden Grain Co., to a new site in Virden, Ill., has been completed.

G. Susdorf & Son have sold their elevator in Weldou, Ill., to Crutsinger Bros., of Hopedale, Ill., for \$11,500.

C. J. Meyer of Peotone, Ill., who recently purchased the elevator in Brisbane, Will county, Ill., is now in charge.

A. B. Puterbaugh has taken his son Harry as a partner in the elevator and stock business at Milledgeville, Ill.

The Farmers' Grain, Live Stock & Coal Association of Deer Creek, Ill., has increased its capital stock from \$6,000 to \$8,500.

The Burrell Engineering Co., of Chicago, will erect elevators at Polk and Puder, Kankakee county, and Judy, Will county, Ill.

Stock to the amount of \$8,000 has been subscribed for the erection of a farmers' elevator at Meyer Station, a few miles south of Pekin, Ill.

The capital stock of the Strawn Farmers' Elevator Co., of Strawn, Livingston County, Ill., has been increased from \$12,500 to \$22,500.

The improvement work on the Kleiss & Gilles Elevator in Pesotum, Ill., has been completed and it now has a capacity of 25,000 bushels.

The Atchison, Topeka & Santa Fe railroad has been granted a permit to erect a one-story brick, concrete and steel grain house in Chicago.

Joseph Ball has purchased the elevator, coal and lumber business of the Walter Stickney Co., at Alworth, Winnebago county, Ill., for \$15,000.

The Waynesville Grain Co., of Waynesville, Ill., has been incorporated with \$5,000 capital by W. T. Marvell, H. G. Longbrake and Otis G. Marvell.

The Illinois Grain Elevator Co., a Missouri corporation, has been incorporated in Illinois with \$10,000 capital to operate warehouses and grain elevators.

The Farmers' Elevator Co., of Taylor Ridge, Rock Island county, Ill., has been incorporated with \$10,000 capital by George T. Harris, J. C. Hofer and W. E. Parmenter.

The two elevators at Lane, DeWitt county, Ill., have changed management. Ben Parker and Edward Hendrix of Maroa, Ill., have leased the Spainhower Elevator, and W. T. Lane has leased the Hartsock Elevator.

The Rock Island Southern railroad will erect a loading elevator in the new town of Burgess, Suez township, Mercer county, Ill., which is now being platted. The firm of Christy & Boyer will also erect an elevator at Burgess.

Secretary S. W. Strong of the Illinois Grain Dealers' Association reports the following recent changes among grain dealers of Illinois: Sawers Grain Co. succeeds H. R. Sawers, Chicago; Washington Mill & Elevator Co., Washington; no dealer, elevator vacant, at Normal; J. A. McCreary succeeds Gordon Mill & Grain Co., Lincoln; John Gunn succeeds Groves & Gunn, Lorraine; S. Crumbaugh succeeds B. F. Baker Grain Co., Leroy; Big Four Elevator & Milling Co., Mattoon; Arnold Bros. succeed Davis & Miller, Thomas Station (Alvin p. o.); Ira Ingram out of business, Bismarck; Rogers Grain Co., succeeds Wright, Janiesburg, Collison and Brothers; Holcomb Dutton Lumber Co. succeeds Holcomb Bros., Esmond and Lindenwood; Forrest, Utley Co.

succeeds J. A. Forrest & Co., Dixie; E. B. Conover succeeds Farmers' Elevator Co., Kilbourne; Horton Bros. & Co. succeed A. H. Edwards, Tolono; Holcomb-Dutton Lumber Co. succeeds Holcomb Bros., Charter Grove; Delany & Fallon succeed J. C. Corbett & Co., Chatsworth; Farmers' Elevator Co. succeeds Gordon Mill & Elevator Co., Burtonview; J. A. McCreary succeeds Gordon Mill & Elevator Co., Skelton (Beason p. o.); John T. Gelsthorp, Midland City, receives mail at Beason; W. T. Lanes succeeds Emerson Hartsock, Lanes; Heudricks & Parker succeed H. C. Shainhouer, Lanes; Railsback Bros. succeed George Susdorf & Son, Weldon; George Christopher succeeds Jackson & Shehan, Dunlap; John T. Daly succeeds Daly Bros., Philo.

IOWA.

The elevator at Little Cedar, Mitchell county, Iowa, has undergone repairs.

The elevator for Anderson & Stockdale in Spirit Lake, Iowa, has been completed.

The O. A. Talbott Grain Co. has leased the elevator of Nat Heiser in Tingley, Iowa.

W. M. Leonard, who purchased the Neola Elevator at Yale, Iowa, is now in possession.

The elevator for the Farmers' Elevator Co. at Washington, Iowa, is nearing completion.

It is not likely that the B. & M. Elevator in Burlington, Iowa, which has closed, will be reopened.

L. E. Baughman has purchased the Western Grain Co.'s Elevator at Cora, Poehontas county, Iowa.

Frank Hoose has become associated with S. H. Lamis in the elevator business at Eddyville, Iowa.

A. F. Rickey has sold his grain and coal business at Griswold, Iowa, to Edwin and Philip Kirehner.

C. H. Betts has sold his grain and feed business near Hartley, Iowa, to the Farmers' Elevator Co., of Hartley.

The Farmers' Elevator Co., of George, Iowa, will equip its elevator with a complete "Hall's Special" Elevator Leg.

A meeting was held recently in Libertyville, Iowa, for the purpose of arranging for a farmer's elevator at that place.

The old grain elevator in Farmersburg, Iowa, has been razed and the foundation has been laid for a new structure.

The Sunbury Grain Co., an organization composed of Cedar county, Iowa, farmers, has been incorporated with \$14,000 capital.

C. C. Crawford is enlarging and otherwise improving the Soo Grain Co. Elevator at Ida Grove, Iowa, which he recently purchased.

C. H. Mammen has been elected president of the Farmers' Elevator Co., which was recently organized in the new town of Brunsville, Iowa.

C. E. Lowery recently purchased the Conger & Ball Elevator in Correctionville, Iowa, and it is now being operated under the style Lowery & Son.

Construction work will be commenced at once on a co-operative elevator for farmers at Industry, east of Fort Dodge, Iowa. Albert Rossow is president, and C. S. Knudson, secretary.

The Fort Dodge, Des Moines & Southern railroad is erecting an elevator to be driven by electric motive power at Roberts, a station south of Fort Dodge, Iowa. The elevator will be leased to the Farmers' Grain Co., of Roberts.

OHIO, INDIANA AND MICHIGAN.

An elevator will soon be erected in Grant, Hardin county, Ohio.

The Flaig Bros. Elevator at Greeville, Ohio, has been purchased by David Mote.

The elevator for Campbell & Fetter in Kendallville, Ind., has been completed.

The addition to the elevator of Williams & Cassel in Dayton, Ind., is nearing completion.

Dan Dimock will install a Hall Signaling Distributor in his elevator at East Claridon, Ohio.

The elevator recently completed by the Oaktown Elevator Co., at Oaktown, Ind., is now in operation.

The new elevator of the Payne & Eikenberry Co., in Collinsville, Butler County, Ohio, is now in operation.

The Cutler-Dickerson Co., of Adrian, Mich., will install a Hall Signaling Distributor in their elevator.

The Oak Harbor Grain & Hay Co., of Oak Harbor, Ohio, has increased its capital stock from \$20,000 to \$30,000.

Smith Bros., Velte & Co., of Coates Grove, Barry county, Mich., have purchased a Hall Signaling Distributor.

Construction work on a 100,000-bushel elevator for the Pioneer Cereal Co., in Akron, Ohio, is well under way.

Morris Kent & Co., grain dealers, will commence at once the erection of a 50,000-bushel elevator in Kalamazoo, Mich. This concern has purchased two elevators at Mendon, one at Gobles, Vanburen

county, Climax, Pine Grove, Kendall, Alamo and Kalamazoo.

Switzer & White of Galion, Ohio, have purchased the elevator at Monnett, Crawford county, Ohio.

The Rosewood Grain Co. is making extensive repairs on the machinery in its warehouse at Rosewood, Ohio.

A. C. Nicol has purchased the Edwards Elevator in Troy, Ohio, and will soon make extensive improvements.

A permit has been issued for the construction of a \$9,000 elevator by the August Ferger Co., in Cincinnati, Ohio.

The Holgate Farmers' Grain Co., of Holgate, Henry county, Ohio, has been incorporated with \$15,000 capital.

The Kingston Grain Co., is preparing to raise its elevator in Kingston, Mich., and replace the post foundation with concrete.

The elevator for the Gardner Grain Co., to replace the structure destroyed by fire at Bellevue, Ohio, has been completed.

The Toledo Elevator Co., of Ohio, with \$50,000 capital, has certified in Indiana for \$23,148.13. The concern manufactures stock food.

The Remington Farmers' Elevator Co., of Remington, Ind., has been incorporated with \$18,500 capital by J. W. Taylor, D. N. Shand, H. C. Beeks and others.

The elevator for George W. Topping at Plummer, Greene county, Ind., which has been under construction for some time, has been completed. Jesse Roach is manager.

George B. Harris has disposed of his elevator business at Fountain City, Ind., to the Clark Bros., well known millers of Hagerstown, Ind. The plant will be remodeled.

The Douglass Grain & Hay Co., has acquired possession of the grain business of C. L. Curless in Lima, Ohio. The new concern will also operate the elevator in South Lima.

Ninety farmers in the vicinity of Cass City, Mich., have subscribed \$6,000 for the organization of a co-operative elevator company which will either purchase or build an elevator.

The Farmers' Educational & Co-Operative Union of America has let the contract for the construction of its elevator at Wheatland, Ind., to Fred Friedline & Co., of Chicago, for \$9,000.

John Walper, owner of elevators at Riga, Blissfield and Ogden, all in Lenawee county, Mich., has purchased the elevator of Weisinger & Munson at Deerfield, Mich., for \$10,000.

The receivers of the Travis-Emmick Co., have sold the elevators at Prentiss, Putnam county, Gallup, Henry county, and Napoleon, Ohio, to Max M. Hyman of Montpelier, Ohio, and M. Herman of Fort Wayne, Ind., for \$23,800.

A farmers' elevator company has been organized in Camden, Ind., to erect a concrete elevator of about 25,000 bushels' capacity. Plans are now being prepared and it is hoped to be ready for business in time for the new crop.

MISSOURI, KANSAS AND NEBRASKA.

A. H. Soflin is building an elevator at Dorchester, Neb.

Cummings & Allen have opened their elevator at Auburn, Neb.

W. L. Stickel has leased the Farmers' Elevator at Kearney, Neb.

Announcement has been made of the failure of the Tri-State Grain Co., of Wichita, Kan.

Spaulding Bros. are converting part of their building in Burlingame, Kan., into an elevator.

F. G. Endelman has leased elevators at Brickton, Adams county, Ayr, Pauline and Hastings, Neb.

E. H. Cramer has purchased two Hall Signaling Distributors for elevators at North Bend, Neb.

The Esmueller Mill Furnishing Co., of St. Louis, Mo., has purchased a Hall Signaling Distributor.

E. H. Foley has ordered a Hall Signaling Distributor for an elevator at Foley, Butler county, Neb.

The Nye-Schneider-Fowler Co. is having its elevator at Oak, Neb., reshingled and otherwise improved.

The Farmers' Elevator Co. is equipping its elevator at Tekamah, Neb., with a Hall Signaling Distributor.

John Burroughs of Marshall, Mo., has purchased the mill and elevator of Goodwin & Fletcher at Gilliam, Mo.

The Bay State Elevator and Feed Yards at Fremont, Neb., will reopen after being closed for some time.

Louis F. Swift, the Chicago packer, will erect a fireproof elevator in St. Joseph, Mo., with a daily handling capacity of 125 cars and to cost \$100,000. The Hynes Grain Co. of Omaha, has a two-year lease with the privilege of renewing. The capacity

will be 200,000 bushels and the grain will be handled by electrical power.

The Farmers' Grain Co., has let the contract for the construction of an elevator at Foley, Butler county, Neb.

McDowell Bros., proprietors of the Alexandria Roller Mills, have leased the West Elevator in Alexandria, Neb.

The Gosnell Elevator at Republican City, Neb., which was purchased by W. N. Clark of Stamford, Neb., is now in operation.

A boiler of the marine type weighing 36,000 pounds has been installed in the plant of the Goodlander Milling Co., at Fort Scott, Kan.

Farmers in the vicinity of Neligh, Neb., will organize a co-operative elevator company and purchase two buildings at a cost of \$18,000.

The McDonald Milling Co. is preparing to build an additional elevator of 30,000 bushels capacity and also a corn meal plant at Carthage, Mo.

Plans have been prepared for the erection of an elevator with 30,000 bushels' capacity to replace the structure destroyed by fire at North Bend, Neb., recently.

The Farmers' Grain & Live Stock Co., which was recently organized at Wynot, Neb., with \$20,000 capital, has purchased the McCaul-Webster Elevator at that place.

The Farmers' Grain Co., of Pierce, Neb., has purchased the elevator, lumber and coal business of D. L. Upton at that place for \$7,000 and takes possession August 15.

The Updike Grain Co.'s Elevator at Winneton, Neb., has been purchased by a Mr. Jones, who in turn has disposed of his elevator at that place to Schwartz & Van Camp.

The Shellabarger Mill & Elevator Co., has not decided when to commence construction work on its twin wheat elevator at Salina, Kan. The concern's \$7,000 office building has been completed.

WESTERN.

A grain elevator will soon be erected in Milliken, Colo.

Construction work has commenced on a 50,000-bushel elevator for Miller Bros., in Rexburg, Idaho.

The Balfour-Guthrie Co., has been granted a permit for its \$80,000 mill and warehouse in Portland, Ore.

A large grain warehouse will be erected in connection with the old City Flour Mill at Ellensburg, Wash.

The firm of C. McMullen & Co., grain and produce, Seattle, Wash., has incorporated with \$100,000 capital.

The capital stock of the Waterville Union Grain Co., of Waterville, Wash., has been increased to \$12,000.

Kemp & Fry, wheat, hay and grain merchants of Prosser, Wash., have dissolved, E. W. Fry continuing.

Construction work has commenced on the elevator for the Montana & Dakota Elevator Co., at Poplar, Valley county, Mont.

The Moccasin Farmers' Elevator Co., of Moccasin, Fergus county, Mont., has been incorporated with \$25,000 capital by H. S. Woodward, C. O. Ray and Michael Hogan.

Burglars blew the safe in the office of Oscar H. Solebakke & Co., hay, grain and feed merchants, Seattle, Wash., recently and secured \$130 in gold and valuable papers.

EASTERN.

Edgar Hobbs has engaged in the grain business in West Ossipee, Carroll county, N. H.

J. Spencer Morrison has been granted a permit to erect a three-story frame grain elevator to cost \$2,500 in Philadelphia, Pa.

The Union Grain Co., of Plainfield, N. J., has been incorporated with \$50,000 capital by A. J. Smalley, Frank Mobus and Joel P. Ryno.

Plans are being prepared for a 500,000-bushel elevator for the Western Maryland Railway in Port Covington, a suburb of Baltimore, Md.

W. T. George has sold his grain and feed business in South Ryegate, Vt., to Clark & Davidson of Groton, Vt. Mr. George will manage the business.

The Dinsmore Grain Co., of Augusta, Maine, has been incorporated with \$10,000 capital by J. R. B. Dinsmore, Edson L. Hammond and Armand R. Smith.

John H. Walters will erect an elevator in Philadelphia, Pa., to cost \$2,500. It will be a steel skeleton structure, covered with corrugated sheet iron.

Grain merchants and brokers of Boston, Mass., are anxious to have the Grand Trunk railroad extend its eastern lines to Boston, making the Hub the eastern terminus.

Construction work recently commenced on the elevator and buildings for the Eastern Grain Co., in Bridgewater, Mass., to replace the plant de-

stroyed by fire in May. The capacity will be 40,000 bushels.

W. N. Potter & Sons are negotiating for the purchase of the Springfield Flour & Grain Co.'s plant, Springfield, Mass. This concern operates fourteen houses in Massachusetts.

SOUTHERN AND SOUTHWESTERN.

A grain warehouse is being erected at Phoenix, Ariz., by Mr. Miller.

A grain house for the Marion Milling Co., of Marion, Ky., has just been completed.

A grain elevator will be erected at Rosenberg, Texas, by Whisler, Teague & Galimore.

Rapid progress is being made in the erection of the elevator and warehouse for S. T. Beveridge at Richmond, Va.

S. S. Offutt & Co., a Georgetown, Ky., grain firm has assigned, with liabilities of \$40,000 and assets of about \$20,000.

It is probable that a grain elevator will soon be erected on a site purchased by the Alfred J. Peters Co., in Phoenix, Ariz., recently.

The Glendale Grain Co., has sold its wheat elevator at Glendale, Ky., to George Rider, J. H. Ashlock and Marion Hoover for \$4,250.

The Ganado Mill & Elevator Co., of Ganado, Texas, has been incorporated with \$60,000 capital by N. Strauss, L. I. Sanford and others.

The Farmers' Grain Co., of Little Rock, Ark., has been incorporated with \$10,000 capital by C. E. Hayes, Walter Brown and James Thomas.

A sprinkling fire protective system will be installed in the grain elevator at the docks and in the dock warehouses at Port Arthur, Texas.

Construction work has commenced on a warehouse and elevator for the Birmingham Grain Co., at Birmingham, Ala. The cost will be \$30,000.

William Major of Bushyhead, Rogers County, Oklahoma, has purchased a 1,000-bushel National Automatic Scale for his elevator at that place.

The Checotah Hay & Grain Co., of Checotah, Okla., has been incorporated with \$10,000 capital by J. H. Maddox, W. J. Carden and N. L. McClain.

The Monarch Mill & Grain Co., of Whitesboro, Texas, has been incorporated with \$40,000 capital by J. M. Sherman, M. E. Sherman and J. E. Gory.

The grain drier for the elevator in course of erection at Texas City, Texas, has been completed and work on the cupola to cover the tanks is now under way.

The Farmers' Union Gin, Mill & Elevator Co., of Dodd City, Fannin county, Texas, has been incorporated with \$10,000 capital by W. O. Guthrie, C. L. Glover and J. P. Kincaid.

The Cage Grain Co., of Palestine, Texas, has filed an amendment to its charter decreasing its capital stock from \$25,000 to \$12,500 and changing its name to the Palestine Grain Co.

The Board of Public Works of Chattanooga, Tenn., received bids recently for the erection of a grain elevator on the wharf leased by the Tennessee Navigation Co., in Chattanooga, but it is not likely that construction work will commence or some time.

THE DAKOTAS.

An elevator is being erected for Swan Nelson at Warner, S. D.

Starr Dawley has disposed of his grain business at Antler, N. D.

The Freeman Elevator at Aberdeen, S. D., is undergoing repairs.

An elevator will be erected at Fife, between Mina and Abcrdeen, S. D.

Work has commenced on the farmers' elevator at Houghton, S. D.

The foundation of the Atlas Elevator at Faulkton, S. D., is being rebuilt.

O. P. Rankin has purchased the elevator of J. G. Stewart in Nekoma, N. D.

Dyball & Cotton are now in possession of the Van Dusen Elevator at Bruce, S. D.

The Farmers' Elevator Co. has been organized at Montrose, Williams county, N. D.

The elevator that has been in course of erection at Milbank, S. D., has been completed.

The Dorn Elevator at Hendricks, S. D., is now operating under the co-operative plan.

Work on the foundation for the elevator at Lark, Morton county, N. D., has commenced.

The Minneapolis & Northern Elevator at Hillsboro, N. D., has been closed permanently.

The name of the Lyon Elevator Co. at Washburn, N. D., has been changed to the Occident Elevator Co.

The Van Dusen Co. is repairing its elevator at Goodwin, S. D., and also installing a gasoline engine.

The Kermit Grain & Mercantile Co., of Kermit, N. D., has let the contract for a 10,000-bushel ele-

vator to replace the structure destroyed by fire recently.

The Equity Elevator at Coleharbor, N. D., has been completed.

J. R. Smith and E. L. Lloyd will erect an elevator at Beach, N. D., making the seventh elevator at that place.

Construction work will be commenced at once on the elevator for the Hart-Robinson Co. at Sentinel Butte, N. D.

The plant of the Sharon Mill & Elevator Co., at Sharon, N. D., has resumed operations after undergoing repairs.

Messrs. Lynch, L. Lorber and J. Lorber have purchased the Hawkeye Elevator and lumber yard at Wetonka, S. D.

George D. Stewart has purchased the old Atlas Elevator at Viborg, S. D., from H. C. Christenson and Frank Olsen.

C. W. Plain of Milton, N. D., has purchased the Imperial Elevator Co.'s flour house at Langdon, N. D., from the Farmers' Elevator Co.

The elevator owned by the Cameron Bros. at Kramer, N. D., has been purchased by William Honadel, former manager of the Atlantic Elevator.

Farmers in the vicinity of McVille, N. D., have decided not to organize an elevator company this year.

CANADIAN.

The Northern Elevator Co. will erect an elevator at Wynyard, Sask.

The Manitoba Government Elevator Commission recently placed orders for material for seventeen elevators. Work on these structures will commence at once.

The foundations are now being laid for the Harbor Commissioners' Elevator in Montreal, Que. The structure is to be completed by May 1, 1912, and will cost about \$1,500,000.

The Government Commission within the last few weeks has taken over fourteen elevators from various private concerns in the province of Manitoba. The points where elevators have been acquired are: Gretna, Hartney, Souris, two Hamiota, Swan Lake, Somerset, Shoal Lake, Strathclair, Dominion City, McGregor, Roland, Snow Flake, Lauder.

The 30,000-bushel elevator that is being erected by the Government Elevator Commission at Dufresne, Man., is about half completed. A number of officials recently inspected the work. The Commission plans to have seventy-five elevators under its control by the time the crop begins to move. A number of buildings that have been purchased are now undergoing repairs.

[For the "American Elevator and Grain Trade."]

ST. LOUIS GRAIN TRADE NOTES.

BY L. C. BREED.

Receipts of wheat for the first seven months of this year were 7,648,460 bushels as against 7,087,320 bushels for the same period last year; receipts of corn were 15,078,835 bushels—last year 13,307,235 bushels; receipts of oats 35,063,025 bushels—last year 31,164,120 bushels. Grand total 1910 (seven months), 35,063,025 bushels; last year 31,164,120 bushels.

Plans are being formed for a permanent United States Agricultural and Industrial Exposition. The promoters of the scheme are prominent St. Louis business men and it is proposed to incorporate a stock company, the shares of which to be placed at a low price in order to secure co-operation of a large number of St. Louisans. The various business and civic organizations will endorse the movement, as representatives from them have already held meetings for the purpose of forming the plans.

The amount of pop corn annually raised in Missouri is estimated to average 5,500,000 pounds, of which amount St. Louisans are credited with eating 2,500,000 pounds. The crop last year was worth \$166,500. A large percentage of the crop is consumed in the localities where it is raised.

In the game of baseball recently played between the Millers' Club and the Grain Club, the Grain Club were the winners, the score being 29 to 16. Joseph Foerstel was umpire and there was a large attendance. The pit crowd has challenged the winners to play at an early date and the feed men have announced they will challenge the winners of this game.

Bert H. Lang was presented with an elegant old English lounging chair by his friends of the Exchange in return for the many courtesies extended to the grain men at their recent outing at his country place. John L. Messmore, president of the St. Louis Grain Club, made the presentation speech on the occasion, which took place in the directors' room. Ed. Flesh, Roger P. Annan, Thomas Teusdale, Fred Seele, Henry Schultz and Charles Nieheimer were the committee in charge of the affair.

Josephine, Missouri's prize cow, has smashed an

other world's milk record, taking it away from Wisconsin's prize milker, whose record for six months was 15,541 pounds as against Josephine's total for the same period of 16,744 pounds of milk. Her high mark for a single month is 2,960 pounds. Josephine is a Holstein, while the Wisconsin cow is a Holland. Score one for the Dutch!

Missouri corn raisers are gratified to hear of the record made by a New York policeman who devoured sixty-one ears—except the cobs—in three hours. The contest was a part of the festivities at a picnic. There were many contestants for the prize and over 8,000 ears were disposed of. The policeman admits that a Kansas man once disposed of sixty-eight ears in three hours, but he proposes to challenge said Kansan for the world's record and \$500 a side, next month. There are four-legged hogs who could probably beat the two-legged ones!

Eight members of the Exchange have been appointed as delegates to the seventeenth annual convention of the National Hay Dealers' Association. The delegates include Fred Deibel, Anchor Hay & Grain Company; D. W. Clifton, Nanson Commission Company; Dan S. Mullally, Langenberg Bros. & Company; W. H. Karns, D. P. Byone & Company; J. M. Fuller, Slack-Fuller Grain Company; Martin J. Mullally, John Mullally Commission Company; W. A. Miller, W. A. Miller Hay & Grain Company.

President Cochrane has appointed ex-President Edward E. Scharff to represent the Merchants' Exchange on the National Advisory Committee of the American Embassy Association which has headquarters in New York City.

The board of directors having passed a resolution authorizing it, tickers to carry the quotations of the Exchange will be installed in the offices of the following firms: Milliken-Helm Commission Company; A. H. Norris & Company; Fayne & Becker; Schreiner Grain Company; T. E. Price & Company; Peavy Grain Company; D. R. Francis & Brother; Paul Brown & Company. This movement is designed to put St. Louis on a par with Chicago with respect to grain quotation service. To guard against the use of the quotations by bucket shops, the Exchange retains control and ownership of the quotations and reserves the right to deny quotations to any subscriber in case of abuse of the quotations.

Frank J. Miner, manager of the Merchants' Stock & Grain Company, convicted of maintaining a bucket shop, has been sentenced to serve five years in the Missouri penitentiary.

The amended bill to change the present city laws with regard to public weighing has been passed and signed. This removes an obstacle in the way of the Exchange and leaves it free to introduce a new method of weighing. It is now up to the board of directors and a committee has been appointed to formulate a satisfactory plan. This matter has been an eye-sore to the members for a long time, as they had been assured that the tax of 20 cents a wagon load was excessive and worked to the injury of the St. Louis market, since at Chicago, for example, it is but 50 cents a car load, consequently a material reduction, as now proposed, will be quite welcome. Taking 1,800 bushels as the average car load, divided into nine loads, the charge for weighing has amounted to \$1.80 per car and the city weigher assumed no responsibility for the out-turn of the car.

The Farmers' Elevator Company of Taylor Ridge, Ill., has been incorporated. Capital stock \$10,000. Incorporators—Geo. T. Harris, J. C. Hefer and W. E. Parmenter.

The Farmers' Grain, Live Stock & Coal Association of Deer Creek, Ill., certifies to an increase in capital stock from \$6,000 to \$8,500.

The Illinois Farm Improvement Company of Bloomington, Ill., has been incorporated. Capital stock \$25,000. Incorporators—Julius Funk, Ralph DeMance and Yeritz Bennett. The company will deal in grain fertilizers, etc.

The United States Stock Food Company of Kansas City, Mo., has been incorporated. Capital stock \$15,000. Incorporators—James A. Haskett, G. H. Forsee and W. F. Tuttle.

The Farber Seed Company, of St. Joseph, Mo., certifies to an increase of capital stock from \$5,000 to \$10,000.

The Exchange Cotton & Linseed Meal Company of Kansas City, Mo., has been incorporated. Capital stock \$5,000. Incorporators—A. L. Parnham, C. G. Schaefer and I. W. Hubbard.

The Farmers' Grain & Elevator Company of Hydro, Okla., has been incorporated. Capital stock \$10,000. Incorporators—T. J. Jordan and W. L. Johnson, of Hydro, and S. J. Strong of Weatherford.

The Dunlop Milling Co. at Clarksville, Tenn., on July 17 bought one "pool" of wheat containing 50,000 at Allensville and another of 45,000 at Trenton, Ky., at \$1 per bushel.

Guy F. Boman has been appointed chief grain inspector at Atlanta, Ga., by the Atlanta Grain Dealers' Association. He had been connected with A. P. Morgan Grain Co. there for a number of years.

THE EXCHANGES

E. A. Moody, provision inspector of the Kansas City Board of Trade died suddenly in July; aged 48 years.

A seat on the New York Stock Exchange was sold on July 14 for \$65,000, a shrinkage of \$11,000 since the last previous sale.

The Kansas City Board of Trade has increased commission fees between members from $\frac{1}{2}$ c. to $\frac{3}{4}$ c. on wheat and from $\frac{1}{4}$ c. to $\frac{3}{8}$ c. on corn.

The commission rule on the Winnipeg Grain Exchange of 1c. a bushel, suspended for a year, has been restored and is again in force and effect.

The St. Louis Grain Club had its barbecue outing at the country home of B. H. Lang, president of the Club, in July. There were about 150 guests.

The Cincinnati Chamber of Commerce has voted down a proposed rule requiring members to charge interest in advance on consignments of grain, hay, etc., to that market.

The Chicago Board of Trade base ball team "walloped" the Bankers on July 23; and incidentally netted the United Charities' outdoor camp at Algonquin a handsome sum.

Visiting Sir Knights Templar at the Chicago claque of last week were tendered all the courtesies of the Board of Trade, their badges entitling them to admission to the trading floor at all times.

The directors of the Cincinnati Chamber of Commerce has named Ed. F. Dennis, chief hay inspector, a delegate to represent the Chamber at the annual convention of the National Hay Association.

The National Elevator, Chicago, has been made regular for the storage of grain for the ensuing year. The elevator is operated by Bartlett-Frazier, and is on the Alton, having a capacity of 1,000,000 bushels.

The Cincinnati Chamber of Commerce grain committee having recommended that the inspection rule differentiating new from old grain be rescinded as inoperative, a rule to that effect has been adopted.

On July 22 a special election was held at which Mr. C. F. Freeman was chosen a member of the Board of Arbitration of the Milwaukee Chamber of Commerce to fill the unexpired term of L. L. Runkel, resigned.

Almir C. Cox of Campus, Ill., has been expelled from the Chicago Board of Trade. The charge preferred against him was uncommercial conduct. It is understood that he was found guilty of bucket-shopping trades.

While some members at Chicago have petitioned the directors to abolish the daily "Call," Toledo has widened the call to include wheat, and members of the New York Produce Exchange have begun a movement to establish a "Call" market there.

At the Board of Trade directors' meeting of July 20 the report of the committee to prepare an amendment to the rules requiring a margin of cash grain trades was referred to a committee. The wording of the amendment was considered as not specific enough, and the committee will rearrange it. A petition asking that the cash grain call be abolished was also referred to a committee.

It is expected that the Millers' Club of Kansas City will join with the Board of Trade in the occupation of a seventeen-story building to be erected by Barber & Barber on the southwest corner of Twelfth Street and Baltimore Avenue. If this is done, the two organizations together will occupy more than half of the structure. As soon as leases are signed, work on the building will begin.

The New York Produce Exchange has sent to the Chicago Board notice of its disapproval of the proposition to extend the trading hours at Chicago. The Liverpool "Corn Trade News" also has suggested that the papers there would be unable to print the American closing prices until the next day if the hours were lengthened and that the editor believed a good deal of foreign business would be lost in consequence.

A movement has been started at Houston, Texas, to establish an exchange to conduct a rice market and to stimulate the co-operation of rice buyers, farmers, jobbers and millers. In order that the feeling of the millers throughout south Texas might be ascertained in this respect, A. E. Groves, secretary-treasurer and manager of the Texas Rice Growers' Association and Exchange, recently queried a number of the prominent mill managers. In the main, they are in favor of the proposition.

With one exception the amount of grain handled by the members of the Duluth Board of Trade in the crop year, which ended on July 30, was the largest in the history of the organization. The total amount of American grain handled was 90,702,203 bu. compared with 80,864,780 bu. in the year previous. The biggest year in the history of the board was in 1898-9 when the amount handled was 99,133,000 bu. In the year which closed Saturday 4,740,279 bu. of Canadian grain was received

by this market in bond, making a total of 95,442,482 bushels.

The proposed rule covering the matter of charging interest on advances on consignments of grain, hay and mill feed to this market, which was referred to the grain trade, has been voted down by grain men of the Cincinnati Chamber of Commerce and the directors have dropped it.

RICHMOND FLOUR EXCHANGE.

The annual reports of the Richmond Grain Exchange were presented to the directors on July 13. The present membership is 66, a gain of five for the past year. B. A. Jacob was re-elected secretary for the thirteenth term.

That gentleman's report for the previous year

D. Butler, W. W. Lefew, R. M. McIntyre, R. M. Smith.

HOME OF THE PITTSBURG EXCHANGE.

Since April 1 the Pittsburg Grain and Flour Exchange has occupied almost the entire seventh floor of the Wabash Building, which we show in the accompanying illustration. The building is located at the corner of Liberty and Ferry Streets, close to Fifth Avenue, in the central business district of the city, and is located conveniently to all banks and mercantile houses. The greater number of grain firms of Pittsburg now have offices in the building, and it is expected that still more will secure quarters there before the first of the year.

W. C. Ilodell is now president of the Exchange;



HOME OF PITTSBURG GRAIN AND FLOUR EXCHANGE.

showed the following receipts for the year: Wheat, 1,548,742 bushels; corn, 2,605,700 bushels; oats, 2,441,612 bushels; rye, 86,942 bushels. Total, 6,682,966 bushels, an increase of 1,651,522 bushels over last year's work. Flour, 214,824 barrels, an increase of 4,585 barrels; hay, 26,926 tons, a decrease of 1,510 tons; mill feed, 20,843 tons, an increase of 9,081 tons. In addition to the foregoing large quantities of meal, peas and grass seed are traded in on change, of which no record is kept.

Inspections during the year were: Grain, 324 cars; hay, 153 cars, an increase of 87 cars of grain and a decrease of 32 cars of hay.

The following standing committees for the year were then elected, the first named on each being chairman:

Executive Committee—John F. Jacob, N. R. Savage, John R. Cary, George D. Mayo, J. E. Cox.

Arbitration Committee—W. C. Bentley, T. L. Moore, John S. Lear, Nat Frazer, W. F. Green.

Appeal Committee—John R. Cary, B. Lorraine, J. Lee Koiner, William Temple, W. P. Wood.

Grain Committee—S. T. Beveridge, H. G. Carter, W. G. Bragg, R. L. Chenery, S. R. Gates.

Hay Committee—C. W. Wingfield, J. J. Fairbanks, W. C. Todd, E. B. McGeorge, I. L. Sutherland.

Trade Committee—W. F. Richardson, Jr., W. T. Selden, F. P. Cooke, R. A. Justis, George D. Morgan.

Quotations Committee—J. E. Cox, Edward Alvey, John R. Cary, H. G. Carter, C. W. Wingfield.

New Members Committee—George D. Mayo, W.

W. W. Beatty, vice-president; Alfred Lawton, secretary, and John Schmidt, treasurer.

NEW RULE AT MILWAUKEE.

Sec'y H. A. Plumb reports that on July 22nd, amendments to the rules of the Milwaukee Chamber of Commerce were adopted providing that on grain, seeds, hay or millstuffs sold in that market, payment must be made therefore on date of presentation of the bill, if bill is delivered prior to 11 o'clock a. m.; that on grain etc., sold to forward from this market, the seller may make an advance upon the buyer for the approximate value of the property, subject to settlement of difference when the property is unloaded; also an amendment providing that on grain so sold for forwarding outside of Milwaukee the commission merchant shall charge the shipper interest on advances for not longer than seven days.

CHANGES IN EXCHANGE MEMBERSHIP.

Boston.—Sec'y McKibben reports that of 86 new members of the Boston Chamber of Commerce added in July, only Warren A. Peirce of Peirce & Winn Co., Arlington, Mass., is interested in the grain trade.

Baltimore.—Sec'y Hessong reports that Paul Frame of the firm of Frame, Knight & Co., Baltimore, and Herbert E. Rycroft of the firm of Bartlett, Frazier & Co., Chicago, have been elected mem-

bers of the Baltimore Chamber of Commerce, and that the certificates of Wm. M. Knight (deceased) and Jas. A. Patten were transferred.

Chicago.—Sec'y Stone reports the following changes in membership of the Chicago Board of Trade: New Members: Fred Seyfried, J. Clarke Dean, J. Balovitz, Winfield S. Brainard, John G. McCarthy, Winfield Denton, Roy M. Hitch, Samuel Mincer; withdrawn—John B. Morrow, Herman Petersen, Jackson T. Harris, Chas. B. Gale, Est. Thos. A. McIntyre, Osgood C. Heath, Est. of L. C. Platt, Chas. E. Thayer, Theodore A. Pletsch.

Cincinnati.—Supt. Murray of the Cincinnati Chamber of Commerce reports the following elections to membership in July: L. B. Dierkes, New York Life Insurance Co., Traction Bldg.; and Walter S. Kyle of Kyle & Rodgers, grain dealers, Mercantile Library Bldg.

Duluth.—Sec'y MacDonald reports that M. P. Schmitt has withdrawn his membership in the Duluth Board of Trade.

Kansas City.—Sec'y Bigelow reports the following changes in membership of the Kansas City Board of Trade in the month of July: Donald Moffatt, admitted on membership in place of W. E. Simison and H. T. Mulhall in place of D. W. C. Bower, deceased.

Milwaukee.—Sec'y Plumb reports the following changes in membership of the Milwaukee Chamber of Commerce in July: New members—Frederick D. Underwood, Frank A. Wells; transferred memberships—C. W. Gillett, Jas. A. Patten, E. A. Cohn.

San Francisco.—Sec'y Friedlander reports the following recent changes in the membership of the San Francisco Merchants' Exchange: Louis James, of Danforth Wholesale Co., to succeed E. Danforth, deceased; M. Grunauer, hay and grain, to succeed J. H. Bennett; F. W. Carey, of F. W. Carey & Co., to succeed Mailler Searles; Yuji Nagashima, of Mitsui & Co., to succeed H. Tsuda; Roht. S. Moore, of Moore & Scott Iron Works, to succeed M. F. Tarpay; Wm. R. Pentz, of The Bank of California National Association, to succeed Homer S. King; Sigmund Schwabacher, of Stockton Milling Co., to succeed A. Schwabacher.

Toledo.—Sec'y Gassaway reports the election of R. J. Wendt to membership in the Toledo Produce Exchange on the certificate of T. L. Keck, deceased.

NEW BOARD OF TRADE BUILDING.

The proposition to lease the ground on which the Chicago Board of Trade building now stands to a company who will erect a new building will be submitted to the members for ballot on August 29. The resolution for the vote as adopted was as follows:

"Resolved, That the board of directors of this association submit to a vote of its members, after a prior thirty days' notice of the intention to take such a vote, the question, 'Shall the Board of Trade of the City of Chicago lease its land for a term of 198 years to a responsible company or trust upon the first day of May, 1911?' and, if a majority of votes cast at such balloting shall be in the affirmative, then the Board of Trade of the City of Chicago, through its president and secretary, shall be authorized to give a six months' option to a company, or trust, to enter into a lease, and, if said option is exercised within such time limit, then the president and secretary shall be authorized to sign on behalf of this association such option, on the terms recommended by the committee appointed by this association on August 11, 1909, with such amendments or alterations and on such terms and with such security as the directors and attorney of the board may elect."

The plans contemplate the erection of one of the largest and most ornate buildings in the city—a "show piece," to cost several millions. It will be twenty-one stories high and constructed of granite for the first five stories and of terra cotta from there up, which will give it the appearance of a solid granite building. It will have a modernized, classic front of the old Roman type of architecture. The principal feature of the front is to be the open colonnade or loggia, which will face LaSalle street. This colonnade will be three stories high, but will be equivalent to four stories of the average Chicago building. The architectural motive is of the Corinthian order, placed on a base fifteen feet high. The colonnade is surmounted by an attic story, richly ornamented and forming a decorative frieze across the entire building.

"The board room will be a little larger than the present one occupying the entire width of the lot. The scheme is the same as in the present building, except that the board room is at the rear instead of at the front. The rest of the structure will be utilized as a very large office building, with the offices of moderate depth to insure perfect lighting.

"The building committee reported a plan for the leasing of the ground, recommending that the building be constructed by a company or trust at a net annual rental of \$160,000 and that the Board of Trade rent the second, third and fourth floors at an annual rental of \$60,000, payable quarterly in advance."

ASSOCIATIONS

The Directory of Iowa Grain Dealers, corrected to July, 1910, is now ready, and copies may be obtained by addressing Sec'y Geo. A. Wells of the Western Grain Dealers' Association at Des Moines, Iowa.

Secretary Strong reports the following new members of the Illinois Association: J. E. Bennett & Co., 309-310 Postal Bldg., Chicago; The Quaker Oats Co., 1604 Railway Exchange, Chicago; W. H. Barrett & Bro., Owaneco; F. C. Cahill, Rosemond; Lamoreaux & Inkster Bros., Melvin; B. K. Byerly, Catlin.

Secretary Taylor reports the following new members of the National Hay Association since our last report: W. R. Harris & Co., Bucyrus, O.; Mystic Milling & Grain Co., Rochester, N. Y.; Virginia Feed & Grain Co., Petersburg, Va.; The Mahood Hay & Grain Co., Pittsburgh, Pa.; Henry P. Cannon, Canonsburg, Pa.; Wendling & Co., St. Louis, Mo.; S. Shoemaker & Son, Berne, Ind.; Virginia Seed & Feed Co., Lynchburg, Va.

COMING MEETINGS.

National Hay Association, August 23, 24 and 25, at Cedar Point, O.

Council of North American Grain Exchanges, September 12, New York City.

Grain Dealers' National Association, October 10, 11 and 12, at Chicago.

REVISION OF NATIONAL TRADE RULES.

The Illinois Grain Dealers' Association in 17th Annual Convention assembled adopted the following resolution:

"Whereas, The Trade Rules of the Grain Dealers' National Association were adopted October 3, 1902, amended October 8, 1903, and revised January 1, 1906; and

Whereas, The customs, conditions and methods in the grain trade have materially changed; therefore be it

Resolved, That the president of the Grain Dealers' National Association be respectfully requested to appoint a committee consisting of an equal number of members who are country shippers, selected from associations affiliated with the Grain Dealers' National Association, and a like number of direct members of the Grain Dealers' National Association, to thoroughly revise said trade rules and make report at the Grain Dealers' National Association meeting to be held in Chicago during October, 1910."

In pursuance of the above resolution, President Tyng has announced the following Special Committee to co-operate with the standing Committee on Trade Rules of the National Association: Geo. D. Montelius, president of the Illinois Grain Dealers' Association, Piper City, Ills.; W. L. Shellabarger, of the Shellabarger Elevator Co., Decatur, Ills.; M. W. Miller, president of the Ohio Grain Dealers' Association, Piqua, Ohio; W. B. Foresman, president of the Indiana Grain Dealers' Association, LaFayette, Ind.; and Henry L. Goemann, of the Goemann Grain Co., Toledo, Ohio.

ARBITRATION CASE.

The following arbitration decision by the committee of the Texas Association is kindly furnished by Secretary G. J. Gibbs:

Lamb & Hollingsworth vs. Andrews & Ranson Co.—Rehearing.—[E. R. Kolp, E. W. Crouch and E. W. Rollow, committee.]

Claim filed before the arbitration committee of the Texas Grain Dealers' Association, by Lamb & Hollingsworth of Augusta, Ga., against Andrews & Ranson Co., of Fort Worth, Texas, for the sum of \$90 brokerage on 18,000 bushels of oats sold for account of defendants. The above claim was considered by this committee Dec. 21, 1909, and a judgment rendered against defendants for the sum of \$22.81; but on account of the fact that certain parts of the record were not then before us, a re-hearing was granted on the request of plaintiffs.

The testimony before us shows that during June and July, 1908, plaintiffs, acting as brokers, sold for account of defendants to sundry firms in Augusta, Ga., 18,000 bushels of oats, for which sales plaintiffs were to receive a commission, or brokerage of one-half cent per bushel. There is contention between the parties as to the sort of oats sold, defendants claiming to have sold simply No. 3 or better oats, while plaintiffs claim that all the sales were No. 3 or better red oats. All the preliminary correspondence indicates that No. 3 red oats were being offered by the defendants, and the confirmations of plaintiffs clearly stipulate No. 3 red oats. The defendants shipped 4,562 bushels of red oats on the contracts, and then offered to fill the remainder with oats that would grade No. 3, and claimed the right to ship No. 3 oats irrespective of origin. The plaintiffs contended for red oats, and refused to accept Western or any oats that were not Texas red

oats. The defendants admit owing brokerage on the 4,562 bushels actually shipped, but deny that brokerage is due on the remainder.

After a careful examination of all the testimony we are of the opinion that defendants sold red oats to be shipped from Texas and to grade No. 3 or better. The confirmations furnished defendants by the plaintiffs clearly and explicitly state No. 3 or better red oats, and there is nothing in the record to show that defendants ever objected to such confirmations; and we are therefore compelled to hold that red oats were sold, and that defendants were obligated to ship No. 3 or better Texas red oats in order to fill the contracts.

The judgment heretofore rendered on Dec. 21, 1909, will be revised and the full brokerage of \$90 awarded to plaintiffs.

The defendants, Andrews & Ranson Co., are therefore ordered to pay promptly to plaintiffs, Lamb & Hollingsworth, at Augusta, Ga., the sum of \$90, full brokerage on the 18,000 bushels, and the secretary is directed to return the deposit fee of Lamb & Hollingsworth.

ILLINOIS ASSISTANT CLAIMS DEPARTMENT.

Secretary S. W. Strong of the Illinois Association has issued the following circular, which explains itself:

"Dear Sir:—Whether you are sending your claims against the railroads to the Association's claims department or not, the following information and suggestions will make you money, and save time in the collection of your Claims:

"Hereafter when shipping grain, give your consignee the following notice:

"In case there is a loss of weight of the grain in this car, amounting to more than \$3.00, kindly have certificates of weight sworn to before a Notary Public by the person actually weighing the grain, at our expense."

"Such an affidavit can be easily obtained when the matter is fresh in the mind of the weigher. Such an affidavit will be admitted in evidence in case suit must be commenced to collect the claim. As it is now, after a delay of a year or more, it is almost impossible to get the person weighing a car of grain to swear to the weight, with the result that the claim is lost.

"A further word of caution: In making up your proofs to the railroads, do not send them the original of this affidavit, but only a copy.

"We want the co-operation of every member of the Illinois Grain Dealers' Association in the handling of Claims, and furthermore, want this department to be of value to all the members of the association.

"No Claims are accepted \$3.00 or less."

CARS OF WHEAT GO ASTRAY.

Does anybody know "Hold" or "El Reno," or "Oklahoma Express?"

If so it would be a kindness to telephone the Kansas State Grain Department in Kansas City, Kas. Three "stray" cars of wheat are in the railroad yards, one consigned to "Hold, Kansas City," another to "El Reno, Kansas City," another to "Oklahoma Express, Kansas City."

The Kansas Grain Department in Kansas City, Kas., received forty-nine "stray" cars of wheat yesterday. The name "stray" has been applied to cars sent to Kansas City consigned to the name of the person sending the wheat. Some farmers do this and expect to be notified by the grain office of the arrival of their cars and they would in turn notify the inspector where the car is to be sent.

"This is a mistake of the farmer," said S. E. Lee, the chief clerk of the grain office, this morning, "for after the car stands on the track twenty-four hours we have to pay storage on that car of wheat until we hear from the person who sent it here. The proper way for them to do is to consign the car to some grain company that can look after it. Thousands of dollars are spent by the grain department each year paying storage on stray cars. This money would be saved if the farmer only knew the correct manner to send his wheat."—Kansas City Star.

In the hope that it would bring relief to the over-crowded elevator of the port, the Montreal Harbor Commissioners on July 26 decided that in future no more grain would be held in their elevator for local delivery. If this experiment fails, the commission may reduce the time which all grain may lie in the elevator free of charge. At present no charge is made until twenty days have passed.

The first case of pellegra ever known in Pittsburgh and perhaps the first in Pennsylvania, according to Dr. J. F. Edwards, superintendent of the Bureau of Infectious Diseases, was reported from Pittsburgh on July 28. The victim is a woman, whose name or address the authorities absolutely refuse to make public, but they wanted to make the fact public that the disease has appeared here in order that physicians might be on the lookout for future cases.

COMMISSION

Fraser, Smith & Co. is a new firm to engage in the grain business at Minneapolis, Minn.

The H. E. Kinney Grain Co. of Indianapolis, Ind., has filed articles of incorporation with a capital stock of \$10,000. The incorporators are H. E. Kinney, E. M. Strauss, W. S. McDonald and O. E. Hadley.

The grain firm of Carson, Craig & Co., at Detroit, Mich., one of the oldest firms on the Detroit Board of Trade, has passed out of existence. Paine, Webber & Co. of New York have taken over their good will and accounts.

The Bell-McFarland Co. of Toledo, Ohio, has been incorporated with a capital stock of \$5,000 to carry on a general grain business. The incorporators are Harold W. Bell, Hugh McFarland, Martin S. Dodd, Nevin V. Winter and John M. Ormond.

Hart Taylor and A. Clark Dean were admitted to membership in the firm of S. B. Chapin & Co. of Chicago, Ill., on August 1. The copartnership now includes eight members: Simeon B. Chapin, Frederick D. Countiss, Tracy L. Turner, William Ewald, Ira J. Couch, Oliver P. Cook, Hart Taylor, and A. Clark Dean.

The editor acknowledges receipt of a perpetual calendar from Pope & Eckhardt Co., Chicago—a very dainty desk ornament as unique as it is dainty; and if we have good luck with it (for these things are like umbrellas, when they strike other people's fancy, and disappear as mysteriously), we expect to be reminded daily of this popular commission house for the rest of one's natural life.

H. T. Mulhall, who for the past 10 years has been associated with the Armour Grain Co. of Chicago, has resigned his connection with that house to become a partner in the firm of Goffe & Corkener of Kansas City, Mo. Mr. Mulhall was formerly located in Kansas City as representative of the Chicago firm, but later removed to Chicago, from where he goes to Kansas City.

Bert H. Lang, member of the Merchants' Exchange of St. Louis, Mo., was presented recently with a handsome old English lounging chair by the St. Louis Grain Club, composed of members of the Exchange. A committee composed of Roger Annon, Jr., Edward Flesch, Thomas Teasdale, Fred Seale, Henry Schultz, and Charles Niemier, escorted Lang to the directors' room, where the presentation speech was made by John Messmore.

A Pittsburgh delegation from the Pittsburgh Grain & Flour Exchange will go to the National Hay Association at Cedar Point, numbering about thirty, and expect to take the banner this year as last, in the matter of attendance. They will be known from their white yachting caps which they will wear, on which in gold letters will be printed the word "Pittsburg." They will also have handsome badges. The committee in charge of the arrangements is John Dickson, chairman; John Floyd, secretary; W. C. Hodill, treasurer.

The Merriam-Holmquist Grain Co. of Omaha, Neb., has been dissolved and from the old firm two companies have been formed—the Holmquist company and the Merriam & Willard Co. J. W. Holmquist has purchased and will operate Elevator "B" at Fifteenth and Wanderson streets, and N. Merriam will operate for the new company Elevator "A" at Seventeenth and Nicholas streets. The Holmquist company in addition to Elevator "B" is already connected with a line of twenty country elevators and the Merriam & Willard company expects to acquire a line within the next twelve months.

A change was made in one of the oldest grain commission houses on the Chicago Board of Trade recently when William Nash retired from the Nash-Wright Co. The old company has been reorganized as the Nash-Wright Grain Co., under the charter laws of the state of Illinois, with a capitalization of \$50,000. The new company, of which James H. Rawleigh is president, A. L. Wayne vice president and treasurer, and Edward Andrew secretary, takes over the business of the old concern and will continue the business of receiving and shipping grain with the old offices in Suite 717, Postal Telegraph Building. All of the members of the new firm are well and favorably known on the Board of Trade. J. H. Rawleigh is one of the leading hay, grain and feed dealers in Chicago. Mr. Wayne, the new vice president and treasurer, was formerly treasurer of the old company, and Mr. Andrew held the position of secretary of the old organization, as he does now in the new.

Reports have reached the Minnesota Experiment Station of the destruction of entire fields of timothy by caterpillars. The State Entomologist and his assistants have found these caterpillars to be army worms, and farmers have been advised to spray timothy heads or other crops being injured, close to the worms or at edge of field across the line of march, and between the caterpillars and the crop which they threaten. Farmers are therefore re-

sorting to a spray of arsenate of lead, where they can get it, or Paris green. Where it is possible to plow one or two furrows across their line of march and between them and a crop which they threaten to attack, it is a good plan to do so, making the steep side of the furrow toward the above mentioned crop. When they gather in these furrows they can be killed with kerosene. Apparently the localities affected are places where there was no fall plowing last season. These caterpillars are in their resting stage in the ground over winter. Fall plowing is therefore the farmers' safeguard.

[For the "American Elevator and Grain Trade."]

SUPREME COURT OF MISSOURI ON DOCKAGE.

BY J. L. ROSENBERGE.

Member of the Cook County Bar.

The "American Elevator and Grain Trade" published in its issue of November 15, 1909, a report of a decision of the Supreme Court of Kansas on this subject. Now it has to record one of the Supreme Court of Missouri.

A law was passed in Missouri, approved June 8, 1909, which was entitled, "An Act to prevent fraud in the purchase and sale of grain and other commodities." It provided:

"Sec. 1. Every sale of grain, seed, hay or coal shall be made on the basis of the actual weight thereof; and any purchaser of grain, seed, hay or coal who shall deduct any amount from the actual weight or measure thereof, under claim of right to do so by reason of any custom or rule of a board of trade or any pretense whatsoever, shall be deemed guilty of a misdemeanor and shall be subject to a fine of not less than ten dollars nor more than one hundred dollars for each and every offense.

"Sec. 2. No agent or broker selling any grain, seed, hay or coal shall have authority, under claim or right to do so by reason of any custom or rule of board of trade, to sell any grain, seed, hay or coal only on the basis of the actual weight thereof, and any contract of sale of any grain, seed, hay or coal made in violation of this act shall be null and void."

The Supreme Court of Missouri holds this statute to be constitutional so far as concerned a prosecution by the state for a violation of the criminal features of the law, but the question of the validity of the provision that "every sale of grain, seed, hay or coal shall be made on the basis of the actual weight thereof," as effecting the right of actual contract between buyer and seller, it does not consider was properly before it to be passed on. It says (House vs. Mayes, 127 Southwestern Reporter, 305), that it will be time enough to consider the validity of the civil features of this act when the validity of some contract as to the weight of grain is involved in some action which requires the determination of the constitutionality of the portions of the act relating to them. Even if invalid, they would not render the penal clause void, because it can stand on its validity and is not dependent upon the others.

That the inspection and regulation of weights and measures are within the police power of the states, and laws passed by the legislature for such inspection and regulation, requiring dealers and traders to conform thereto, and for the appointment or election of officers or inspectors thereunder, are in the nature of police regulation and not repugnant to the constitution of the United States or of the state of Missouri, can no longer be doubted. Legislation along these lines is found in almost every country, the underlying purpose of which is to secure uniform weights and measures and to guard the people at large against defective and uncertain weights and measures and fraudulent practices connected therewith. While the act under consideration is not aimed at fraudulent and illegal weighing of the commodities named therein, it is aimed at practices which are closely akin to fraudulent weighing. Of what benefit would it be to the shippers of grain to the grain markets like Kansas City to be assured that their grain was properly weighed, if, after it had been correctly weighed, the toll of 100 pounds to the car load, or any other amount which the Board of Trade might determine, should be taken without the knowledge or consent of the shippers by virtue of this so-called rule or practice? The result to him will be the same as if fraudulent scales were used by which his grain was made to weigh 100 pounds less on the car load without his knowledge or consent. The inhibition of this act is against the deduction of any amount from the actual weight or measure under claim of right to do so by reason of custom or rule of the Board of Trade or by any pretense whatsoever.

It was admitted that in grading wheat, dirt and foreign matter are taken into account in determining the value of the grain; but the Kansas City Board of Trade arbitrarily added to this and deducted 100 pounds from every car, so that, if A. shipped a car of grain to Kansas City to a member of the Board of Trade, which was entirely free from dirt or foreign matter, under this rule 100 pounds would be deducted and he would lose the value of

this 100 pounds and receive no compensation therefor but be told that he must submit to this because some other shipper might ship a car load of grain containing 200 pounds of dirt or foreign matter. Thus the grain of A., which contained no dirt, would be taken without compensation, and the man who shipped a car load of grain with 200 pounds of dirt would suffer a deduction of only 100 pounds. When it is considered that this exaction falls upon the producer, who in the end must suffer for the loss, and that it is impracticable for each producer to prevent the wrong, because he must sell on the markets afforded him and must submit to the condition imposed, the injury, owing to the large number of producers, is to the public as well as to the individual producer.

In a concurring opinion Justice Woodson asks that, suppose the rule in question instead of being simply a rule of the Board of Trade, had been an act of the legislature and had provided, just as the rule in effect does, that all purchasers of wheat on change might, without authority from the owners thereof, deduct from each car load purchased the sum of 100 pounds without compensation, would or could it be contended that such an act would be constitutional? Certainly not. That being true, then clearly the rule itself, for stronger reasons, is void, and the legislature unquestionably has the authority not only to fine but also to imprison all who take property of others without their consent.

Counsel stated that there were sold, on an average, on the floor of the Kansas City Board of Trade 500 cars of wheat a day. If we deduct from each car of wheat so sold 100 pounds for each day in the year, it will show that the owners of wheat are annually by this rule deprived of 304,166 bushels, and that too without their consent and without compensation. If the same rule be extended to St. Louis, St. Joseph and other grain markets of the state, then the quantity will be swollen to probably a million bushels. This rule is wrong and vicious and should be condemned, as the legislature has undertaken to do by this act.

WHAT THE DROUGHT MEANS.

The agricultural experts of the Northwest were quite agreed earlier in the season that the prospect for a drought in the semi-arid section of the spring wheat country was indicated. An insistent warning was made to the farmers in the dry belt that the crop should be put in in a way to minimize the strain of such a contingency. Dry farming was encouraged to the extent of the ability of these men to impress upon the producers the probability of deficient rainfall this season. Never before, perhaps, was a drought so surely foreseen yet little preparation was made to offset its direful effects.

The cost has been great and the results, in a way, are more serious than even the loss of the crops. Extreme pessimism has developed in regard to that rich section of the Northwest which in the previous seven years has waxed fat. Many foresee the end of the section's progress and are even prophesying dire things, but all such talk is the veriest nonsense. All the country needs is the proper sort of cultivation which in the end insures a crop with hardly any extra expense.

With the correct application of agriculture labor to the soil and climatic conditions of the country there is no reason for any such repetition such as occurred this season. It is one of the sad commentaries of human life that we have dwelt long in the spirit of let well enough alone. The producer in that section has known that he was tilling the soil in a country subject to less than normal rainfall. For some reason we have had a period of years in which the rainfall was unusually liberal in the semi-arid country and it has gone ahead, growing in wealth without the apparent need of meeting those conditions which the agricultural experts had declared essential to the production of crops. Even with the signs so distinctly pointing to a dry year all precautions were disposed of with a wave of the hand.

This great section of the Northwest has had only a temporary setback. It will be farmed in conformity with the conditions it demands. The lesson has been impressed upon the farmers in a way likely to stimulate careful and scientific farming.—Market Record.

J. M. Riebs, Jr., will resign as manager of the Milwaukee, Wis., branch of the American Malting Co. It is understood that A. W. Goetz, Jr., member of the Milwaukee Chamber of Commerce and manager of the barley department of the Van Dusen-Harrington Co., of Minneapolis, will succeed Mr. Riebs.

The Ohio Valley Exposition will be held at Cincinnati on August 29 to September 24 to celebrate progress in improvement of Ohio River navigation, and to present to the world the natural resources and industries of the Ohio Valley and of the South. Nineteen states in the Ohio Valley and South will participate and show the best of their resources and the greatest of their industries.

BARLEY and MALT

Minneapolis received a car of new barley on July 16; fair quality only; sold for 64c.

The best barley crop in the history of Cerro Gordo County, Iowa, was recently harvested.

The first car of new barley was received in Chicago July 19 and was graded new No. 2. Seventy-two cents was bid for it.

More barley has been planted in the vicinity of Greeley, Colo., this year than ever before and the crop has all been cut.

Barley is yielding a bumper crop in the Sacramento Valley and other sections of California, despite the hot winds of June.

In many parts of South Dakota the barley crop runs about eight bushels to the acre, or 50 per cent of normal. The quality is good.

The barley yield in some sections of southwestern Wisconsin will be unusually good this summer. About all of the crop has been cut. In other sections, however, the yield is low.

Notwithstanding drouth that prevailed for about a month barley will give a fair yield in the vicinity of Winona, Minn. The crop promises to grade unusually well, as no discoloration is shown.

A crop expert who gathered statistics on a trip from Galva, Ill., to Cherokee, Iowa, gives the barley acreage 20 per cent less and yield 28 to 35 bushels, and the aggregate crop about the same as last year.

A record-breaking barley crop, yielding 4,000 sacks and all without irrigation other than that supplied by natural rainfall has been raised by the Chapman brothers on a ranch near Santa Monica, Cal.

H. B. Derr, of the United States Department of Agriculture, has arranged with the Missouri College of Agriculture for that institution to co-operate with the experts of the Bureau of Plant Industry in breeding seed of the beardless barley.

The barley crop this year is the largest in the history of the state, according to a report issued by the California Development Board. Every barley-growing section of California reports an exceptional crop. The quality is also superior.

An exposition called the "American Exposition of Brewing Materials, Machinery and Processes" will be held at Chicago in the fall of 1911. In connection with the exposition will be held the Second International Brewers' Congress and the third meeting of the International Barley Valuation Commission. Invitations were accepted by the First International Brewers' Congress and the International Barley Valuation Commission at their meetings at Brussels, July 23-26, 1910.

BARLEY CROP OF 1910.

The barley crop of 1910 is what you may call a spotted crop,—good in some places, very light in others, and much of what is called shoe-peg barley, but bright in color, just the barley to mix with oats but not fit for malting. There will be lots of this kind of barley; and it may depend on the weather for the next few weeks what kind of barley we shall get. Even that which is bright and plump may be discolored by the weather, but let us hope for the best. The harvest is now on, and the first car of new barley arrived in Minneapolis July 16th, but was light weight and feed barley, not malting barley. The price paid for it was 64c.

I read a quotation today in which it says that barley very excellent, plump, much better than last year, should be bought for 55c. f. o. b. Minneapolis. Now, if any malster can get that class of barley for 55c or even 65c, he will be very sorry later on that he did not buy all he needed; and I want to be on record as having said that before the next season ends such barley will bring more than 75c per bushel, and if a certain thing happens, which came very near happening last season, it will go far above that price. In other years of light barley it was of different nature, and could be used for malting, but not so this year. No malt can be made of shoe-peggy barley.—W. H. Prinz in American Brewers' Review, August 1.

The Electric Malting Co. of Minneapolis says the shortage indicated by the July Government report means nothing, as the malting and brewing industry requires only 70,000,000 bushels of barley, while the indications given out by the Government are for a crop of 153,638,000 bushels. It is extremely unlikely that the shortage will have any effect on feed barley values as the corn crop is in the best possible condition and according to the Government, promises to yield 3,117,000,000 bushels this year, which exceeds the 1909 crop by nearly 450,000,000 bushels. So it will be seen that the shortage of barley from a feed standpoint, is replaced by the corn increase more than 26 times. The Government reports the indications of the oat crop as 1,003,243,000 bushels, which is practically the same as last year."

FIELD SEEDS

"Seed Corn Week" in Minnesota is announced for September 19 to 24.

Reports on alsike from Michigan and Ohio average rather unfavorably to the seed crop.

The banner yield of wheat in Barton County, Kan., was from the county farm of twenty acres seeded to Kharkof, which threshed out 900 bushels.

In view of the crop failures in North Dakota, it is recalled by the press of the state that any county may issue bonds to provide seed for farmers needing such assistance.

Charles B. Cranston, credit man for the Livingston Seed Co., Atlanta, Ga., has been appointed a member of the national legislative committee of the National Association of Credit Men.

The U. S. Dept. of Agriculture recommends the improvement of Wisconsin, Michigan and Minnesota jack-pine lands by the use of Mammoth clover, making clover the main crop for five or six years.

G. D. Sutton & Co., Mason City, Ill., will build a seed corn annex to their plant, to be 40x140 feet on the ground and two stories high. The premises will be furnished for use as a seed corn house exclusively.

The Agricultural Department of the state of North Dakota offers twelve cash prizes amounting to \$475 for the largest and best collection of grains and grasses raised in any one county during the year 1910.

Sac City, Iowa, on July 20 sent samples of growing oats to a Chicago house. One sample of Gar-ton Swedish Select, the first ever grown in that country, promised to be 80 bu. per acre with the grain weighing 40 to 44 lbs.

The sheriff of Benton County, Ia., recently took to Vinton a seed dealer operating in the county, who was charged with violation of the pure food act by selling common field corn to farmers as "tested seed" at \$2.50 per bushel.

The highest recorded price ever paid for Kentucky blue grass seed was paid at Frankfort, on July 26, when the pooled crops of Clarke, Bourbon and Montgomery Counties were purchased by the Ohio Supply Co. of Cincinnati, at \$1.51 per bushel, August delivery.

The Minnesota Department of Agriculture will next winter hold good seed institutes in as many of the towns of the state as the Department's corps of lecturers shall be able to visit, the object of the institutes being to instruct farmers regarding the production and selection of seed.

The price of millet seed on the Minneapolis market on July 26 went to the unprecedented figure of \$5 a hundred pounds. Stores and granaries everywhere are out of the seed and the demand for it from farmers who expect to be short on hay for feeding cattle this winter is increasing.

The South Bristol (Mass.) Farmers' Club unanimously adopted a resolution thanking Congressman Greene for sending its members a supply of Government seeds and asking him not to do it again. He was urged to do what he could to stop the distribution. The farmers condemned the custom not alone because of its cost, but on account of the worthlessness of the seeds.

At a meeting of the Texas Corn Growers' Association at College Station on July 26, Dr. J. D. Loveloss discussed the question of a fair price for good seed corn. He said he sold Laguna corn last spring for \$2.20 per bushel. Mr. Myers said he thought the breeder should have \$3 per bushel. There was a general discussion of the ethics of seed corn, in which it was agreed that the wisest plan was to require all dealers to sell seed corn in the ear.

The importer of clover seed may be our role this season. When our prices are high, Chili, Europe, and occasionally Canada, export to us. When prices are low, like two years ago, we export. Prices have been advancing for several weeks. Will they suffer much reaction? Our former bumper prospect has been fading. Bulls buying and light offerings have caused further advance this week. Our carry-over old seed is small. Foreign prospects better than ours. Chili harvests first. We exported some early last season.—King & Co., Toledo.

The Bermuda grass, says the Country Gentleman's correspondent from Wicomico County, Md. (eastern peninsula), "is the best summer pasture grass in this country because it is a hot-weather grass and keeps green when Kentucky blue grass and other grasses are parched. But in all the country south of the Rappahannock River the Bermuda has now an ally that is rapidly changing waste lands into good pastures. This is the Lespedeza striata, commonly called Japan clover, which has spread over the South since the Civil War. It will be limited in its northern range by frost, for it ripens seed late, is killed down by the first freeze, and must be reproduced by seed. Hence, where the season is too short for the seeding it will not continue. But the Lespedeza, while thriving best

on a moist clay soil, will stand the heat and drought admirably, will grow on the poorest soils, and will run out broom sedge. Unlike Bermuda grass, which will not thrive in the shade, I have seen Lespedeza growing nearly knee high in a dense pine thicket in North Carolina. I have seen it covering the sides of railroad cuts, and on waste spots generally it thrives."

The Illinois Corn Growers' Association will include oats and corn in their exhibit of grain at the annual meeting at Urbana, in January, 1911. The prizes will be ribbons only, but the exhibits will all remain the property of the exhibitors. The winning exhibits may be entered for the National Corn Exposition at Columbus, Ohio, and only such Illinois exhibits as are shown at Urbana will be allowed entry at the National show. Oats and wheat are wanted in their natural state, the whole plant, head, straw and roots, together with a peck (10 pounds) of the threshed grain.

Talk of dry weather seems to be the main factor in clover seed. We always supposed it was dry weather at this period that made the seed. We had the same talk two years ago with predictions of a very short crop. Prices went to about \$9.60, later declined about \$3.00 after the seed started to move freely. It moved for two years and is still coming to market. Will history repeat itself? It really seems too early for such a rapid advance, and with prices up nearly \$2.50 from low point, it ought to discount any real or imaginary damage or shortage on this crop. Will the decline be just as rapid if all the longs at the same time should try to secure paper profits?—J. F. Zahm & Co., Toledo.

In answer to enquiries how to prevent injury to seed corn from wire worm and loss from slow germination, H. Garman, entomologist, etc., of the Kentucky Experiment Station, repeats the suggestion given in the station's Bulletin 145. He says: "Moisten the seed thoroughly with warm water; add to each peck of seed a couple of teaspoonsful of coal tar, and stir well until a little tar comes in contact with each grain. Then spread out at once and dry. The tar will harden in a few hours so that the corn will go through a planter. No fear need be entertained as to the tar injuring the seed. Tests made at the Station show that treated seeds germinate as well or better than those not treated. The tar, in fact, prevents the development of mold on the grain and is thus not only a protection against pests but saves the grain from loss by rotting."

PRODUCTION OF VEGETABLE SEEDS.

There is profit in raising high-grade seed. Seed crops of sweet corn, garden peas, and beans of good quality are in ever-increasing demand, and the quantity needed yearly has become so large that the seedsman is obliged to have the major portion of his stock grown for him by others. Within the past few years there has been an enormous increase in the quantity of seeds produced for commercial purposes. This has been due in large measure to the development of seed growing and handling as a business. There are now nearly one thousand seed firms doing business in the United States. One of the largest of these uses buildings with an aggregate floor space of more than sixteen acres. This space is much larger than was occupied by the entire seed trade of the country only fifty years ago. The quality also has vastly improved. One of the most encouraging developments in the growing of garden vegetables is the increasing recognition of the practical importance of using pure and uniform stocks of seed whose varietal characteristics adapt them to distinct local conditions and market requirements. Another consideration is the fact that the growing of seed crops of these vegetables can be undertaken without any radical change in farm practice or material increase in farm equipment. These conditions make this industry well worth the attention of farmers who are located where soil and climatic conditions are favorable for the best development of such seeds.

However, the raising of these vegetables for seed crops is not recommended for all circumstances, even when soil and climate are suitable. The farmer who contemplates undertaking seed crop farming will do well to consider thoroughly the many elements which enter into profits. Seeds-men are often able to place contracts for growing seed at very low prices—even lower than that at which grain of the species can be sold on the market. Such a condition might be due to any of several causes, but usually rests on an over supply or a demand for an inferior product. The general tendency now, however, is decidedly in the other direction, and both seed dealers and seed growers can do much by co-operation to further this tendency. Dealers should not buy by sample, no matter how good the samples may be, but should endeavor to limit his supply to seed which he knows was grown from pure and true stock seed and, as far as possible, to that which was subject while growing to his own inspection. Knowledge, experience and care on the part of the grower will also

contribute much to a higher standard and consequently to higher prices and better market conditions generally.

In response to a demand for greater knowledge of the cultural methods which are best adapted to seed crop growing for the vegetables mentioned, the U. S. Department of Agriculture has just issued a new publication, Bulletin 184 of the Bureau of Plant Industry, under the title, "The Production of Vegetable Seeds: Sweet Corn, Garden Peas, and Beans." This publication discusses this whole subject very thoroughly and gives instructions for securing crops of seeds for these different species.

SEEDING FOR PASTURES IN MISSOURI.

Circular No. 42, June, 1910, by M. F. Miller, of the Experiment Station at Columbia, is upon the "Seeding of Clovers and Grasses" in that state, being in answer to numerous enquiries on the subject. The common meadow mixture in Missouri is red clover and timothy with a nurse crop of small grain. The first crop is usually pure clover; the second, mixed clover and timothy; the third year, pure timothy. The seeding should be 8 to 10 lbs. of timothy and 6 to 8 lbs. of clover, sowing the clover late in February or early in March on wet lands or where red clover is uncertain, alsike clover is recommended, sown at half the rate of the red.

Where a pasture mixture is desired, timothy, red clover, alsike clover, white clover and blue grass are recommended. The blue grass seed should weigh at least 24 lbs. per bu. and germinate 60 per cent. Where blue grass is seeded (it may sometimes be allowed to come in as the land is pastured), and 6 lbs. timothy, 4 lbs. red clover, 2 lbs. alsike clover, and 6 to 10 lbs. good blue grass. If white clover also is used, add 2 lbs. per acre.

Orchard grass is recommended for the dry, rocky lands of southern Missouri—a mixture of 6 to 8 lbs. timothy, 4 lbs. red or Mammoth clover, 1 lb. alsike, 1 lb. white clover and 8 to 10 lbs. orchard grass. A bushel of oats as a nurse will give some pasture the first spring.

CLOVER CROP.

Samples of clover heads from Indiana received by us August 6 show good possibilities, although many farmers would say no seed. This shipper said, "Writer has been over considerable of the county (Elkhart), and while a good soaking rain might help some, think it is too late to do much good, as the late blossoms could hardly mature and the early heads would shell out if left standing too long. Clipped fields and Mammoth are good stand and well filled but acreage not large." The bulk of damage reports seems to come from about one section in Ohio, or, in other words, a line drawn through the northwestern part of the state extending into Indiana. The buying orders have come mainly from that section. A leading Indiana seed man stated a week ago that he was not worrying over any possible shortage in the seed crop; in other words, he expected an average crop. We also get the same reports from Illinois. No doubt the crop will be late this year, and this has probably caused more or less anxiety amongst a few speculators, figuring that the dry weather would cut short the late crop, but we would prefer to wait until the seed begins to move. The old saying, "A short crop usually has a long tail" held good two years ago, and this year's growing crop has all the ear marks of a repetition.—J. F. Zahm & Co., Toledo.

THE COMING CORN SHOWS.

The jurisdiction of the Northwestern Live Stock Show and Northwestern Corn and Grain Show, at the U. S. Yards, So. St. Paul, November 15-18, is the Northwestern states only, towit, Minnesota, North Dakota, Montana, Washington, Idaho, that part of South Dakota lying west of the Missouri River, and that portion lying north of the southern boundary of Moody, Lake, Miner, Sanborn, Jerauld and Buffalo Counties. In Wisconsin is included that portion of the state lying north of the southern boundary of the counties of La Crosse, Monroe, Juneau, Adams, Marquette, Green Lake, Fond du Lac and Sheboygan.

The seed show is for "county exhibits," which shall consist of a display of grains, grasses and fodders by any county agricultural society or individual officially representing any county in the show territory. All exhibits shall be products of 1910, not less than 10 nor more than 20 correctly named varieties. Prizes are \$100, \$50, \$25 (two).

INTERSTATE FAIR.

Prof. W. H. Olin of Colorado has induced the management of the Interstate Fair at Denver to offer prizes aggregating \$400 for sweepstakes in the seeds and fruit classes.

The Colorado oats trophy is now ready—a vase of Colorado silver, standing three feet high. One side is a picture of a Colorado oats harvest in a mountain valley. The oats employed in the decorations of the vase are the prize winning Swedish

Select. The trophy will be given at the National Corn Show at Columbus, O., to the exhibitor of the best peck of oats shown at the Expositions of 1909, 1910, 1911, 1912 and 1913. The winner in Colorado for 1909 was Clara Haymaker, a 15-year-old girl from Gunnison County, whose oats field produced 4,500 pounds to the acre, and weighed forty-nine pounds to the bushel, but at the National Show the successful contestant was a Minnesota farmer, a Mr. Van Sickle. One pound sample of the winning oats shall each year be placed within the trophy, under seal, to become the property of the state of Colorado at the expiration of the five-year period. The individual oat grower who shall win the trophy the greatest number of times out of five, at least twice, shall be awarded the permanent custody of the trophy. In case no one succeeds in winning this trophy the required number of times within the named five-year period, the trophy competition shall be extended for another five-year period. The trophy name-plate is on the reverse side of the trophy from the harvest scene.

SEPARATION OF SEED BARLEY.

H. B. Derr, agronomist in charge of barley investigations, Bureau of Plant Industry, U. S. Dept. of Agr., in Circular No. 62 gives a description of the "Specific Gravity" method of seed separation, as applied to barley. In the six-rowed barleys, which are principally grown in this country, the head is made up of spikelets arranged in groups of three upon the rachis. These contain one median and two lateral grains. The median grain, having sufficient space to develop, is usually large and plump, resembling that of the two-rowed type. The lateral grains overlap each other, so that they are usually smaller, twisted, and under unfavorable conditions inclined to be chaffy. Experiments show that the plants produced from these lighter grains are inferior to those grown from the larger median ones and frequently do not produce as good grain. For this reason the seed for planting should be thoroughly sorted and cleaned before seeding. The method described here is recommended as a satisfactory means of accomplishing this purpose.

The specific gravity method of seed separation consists in the immersion of the seed in liquids of varying density. These different densities are obtained by the addition of various quantities of salts or other agents by which the specific gravity of the liquid is increased or decreased, as desired. When different kinds of seeds are immersed in these solutions, those which are lower in specific gravity than the liquid in which they are placed will float on the surface. The strength of the solutions must be varied for the different kinds of seeds to be treated. In the separation of barley, however, water can be successfully used.

A simple plan for separating seed barley by the specific gravity method has been successfully used by the Office of Grain Investigations during the past year. The apparatus used consists of two tubs or half barrels with a hole bored at the bottom of each and fitted with a pine plug. On the inside of the tub fine wire netting is tacked over the hole to prevent the loss of grain. Rope handles fitted in holes bored near the top facilitate handling. One tub on horses is set above the other.

The method of procedure used in separating the grain is as follows: The upper tub is filled two-thirds full of water and the seed barley poured in, enough space being left to allow thorough stirring. The plump barley grains will sink to the bottom, while the light and shriveled barley and many of the oat and weed seeds will float on the surface when the grain is stirred. After stirring thoroughly, the grain that floats should be carefully skimmed off. When the skimming is completed, the plug should be pulled out and the water allowed to drain into the tub beneath. The grain should then be emptied from the upper tub upon a clean floor or a piece of canvas and spread out thinly to dry. The tubs can then be reversed and the operation repeated with another lot of grain. In order to dry the grain and prevent it from sprouting it should be stirred occasionally with a clean garden rake or shovel.

This selected seed should be sown as soon as it is sufficiently dry to run through the drill. As the seed will be somewhat swollen, the rate of seeding should be proportionately increased. Seed treated in this manner will be free from small and weak grains, and a better stand and greater yield will be secured from it than from ordinary seed.

This method is not to take the place of the fanning mill, but is to be used in connection with it. It will remove many of the small grains and weed seeds not removed by that machine. Where the fanning mill is not available, the treatment described will be found of great value. If it is desired to treat the seed for smut, the sorting and treating operations can be combined by substituting for the water a formalin solution at the rate of 1 pound of formalin to 40 gallons of water.

The separation and selection of seeds by the

specific gravity test has been practiced, according to Yokoi, in China and Japan for more than two hundred and fifty years. Hellriegel, Rümpler, Nobbe, and many other European investigators have carried on similar experiments. Rümpler, from the results secured in his experiments in the separation of barley seed with solutions of sodium nitrate, advised planting only the heaviest third of the seed.

The separation of seed by the specific gravity method is not new in the United States. The simple plan of placing lettuce and other vegetable seeds in a dish of water and skimming off the light seeds and chaff has been practiced among the Pennsylvania Dutch and their descendants for many years. Lack of knowledge of the process probably accounts for the fact that it has not come into general use. Dr. T. L. Lyon, of the Agricultural Experiment Station of Nebraska, made selections of wheat by the specific gravity method and secured an increased yield from the heavier seed. Prof. H. Garman, of the Kentucky Agricultural Experiment Station, removed weed seeds from hemp seed by this method. Probably the most important work along this line, however, was done by Prof. V. A. Clark, of the New York Agricultural Experiment Station, who conducted numerous experiments with a large number of vegetable seeds, grape seeds, etc. Among his conclusions the following may be cited:

"Specific gravity may be utilized as a means of separating foreign matter, or, occasionally, foreign seeds. * * * A quite definite correlation exists between the specific gravity of a seed and its germination. Seeds of low specific gravity do not germinate at all. Seeds of highest specific gravity, or in the case of oil-bearing seeds those of intermediate specific gravity show the highest percentage of germination. * * * To some extent a correlation appears to exist between the specific gravity of the seed and the vigor of the resulting plant."

FLAX SEED VALUABLE AS SEED.

Prof. H. L. Bailey on July 25 published from the North Dakota Agricultural College the following, addressed to the Flax Growers of North Dakota:

"This is one of the driest years that North Dakota farmers have ever experienced. Flax on old flax lands has not only had to compete with wilt but it has suffered under drouth conditions more severely than the crop can usually withstand.

"Many farmers who have sown flax on old flax lands find that the wilt in connection with the intense drouth has been very severe.

"I am writing this to say that no farmer should allow the fact that there is only a small amount of flax seed produced in the crop per acre to prevent him from saving the seed which does grow for the flax plants which are able to withstand both drouth and wilt will produce seed which is of the highest value.

"Even flax which is quite thoroughly resistant during ordinary years is unable to withstand the wilt and canker under the excessive drouth conditions that have prevailed in parts of the state.

"Those who have any flax which has survived under these very discouraging conditions should save every bit of the seed for sowing purposes as it will be of much value to them in future years.

"Remember that it is the old story of the survival of the fittest, which is in action under such hard growth conditions."

LOOK OUT FOR WEEDS.

The importance of clean seed lies not simply in the loss of money directly paid for weed seeds in grass seeds, which is itself very considerable, but in the resulting damage to the land. For example, the Dept. of Agr. investigating seed qualities found by a careful test the actual number of germinable seeds in a bushel of clover seed, which costs \$5.50 and in a bushel costing \$3.50. In the former, where the price was apparently higher, the cost of good seed was found to be 9.8 cents per pound, while in the latter, where the cost per bushel was \$2 lower, the cost of the good seed was 12.6 cents per pound. From this, it will be easily seen that when buying seed for planting it pays to buy the better grade of seed.

But going further into the enquiry, we are informed by Alvin Keyser of the Colorado Agricultural College, that while weeds give no return, they draw more heavily on the water and plant food supply than paying crops. "Pound for pound, the plant food required by crops and by weeds is almost the same, but weeds are better food gatherers. The greatest difference comes when the question of water arises. Weeds not only require more water but are able to get it. From 300 to 700 pounds of water are used in producing a pound of dry matter in our common crops. Weeds require even more. If it comes to a contest as to which will get it, the weeds will. It is estimated from careful study that Colorado's crop was reduced over 25 per cent in value last year through weeds alone."

PERSONAL

John F. Zarp is at Plains, Kan., operating the 150,000-bushel elevator for the Wilson Land & Grain Co.

Frank G. Crowell, vice-president of the Hall-Baker Grain Co., of Kansas City, Mo., has returned from a trip to Europe.

W. S. Hall, for the past two years agent for the Powers Elevator Co. at Dickey, N. D., has engaged in the lumber business at Nampa, Idaho.

Alex. McDonald, who has been buyer for the Minneapolis & Northern Elevator at Willow City, N. D., has been transferred to Clyde, N. D.

Douglas A. Little, for twenty-five years buyer for the Cargill Elevator in Mankato, Minn., is a candidate for sheriff of Blue Earth County, Minn.

The Tri-State Terminal Elevator Association at a recent meeting in Fargo, N. D., elected A. V. Swanson president and C. U. Peterson secretary.

Charles G. Smith of Hutchinson, Kan., recently resigned as a deputy grain inspector to do a wholesale commission business in grain, wheat and lumber in Hutchinson.

J. T. McMahon, for fourteen years wheat buyer for the Minnesota Grain Co., at Green Isle, Minn., is now in charge of the Security Elevator Co.'s house at that place.

Charles C. Flanley, manager of the Interstate Grain Co. at Sioux City, Iowa, and Miss Carroll Pollard of Sioux City were married at Correctionville, Iowa, recently.

Henry Hanson, who has been operating an elevator at Guelph, N. D., and Miss Ida Skordahl, were united in marriage at Louisburg, Lac Qui Parle County, Minn., recently.

William Fintzel, who has been employed in the office of E. W. Ketcham, grain dealer at Madison, S. D., has become traveling auditor for grain dealers of Madison, who operate line houses.

A. N. Schensnovitch, civil engineer, of Novorossisk, Russia, is traveling in this country, making a study of American grain elevators and the methods employed in this country for handling grain.

J. F. Fraser of New Prague, Minn., who has been prominent in the grain and milling trade of southern Minnesota, is now a resident of Minneapolis and has applied for membership in the Chamber of Commerce.

At the recent annual meeting of the La Crosse Grain Co., in Brownsdale, Minn., M. Stephenson was re-elected president and G. M. Short was elected secretary to succeed J. A. Grisdale. The concern operates eighteen elevators.

Edward H. Young has resigned his position as vice-president of W. H. Small & Co., Evansville, Ind., and has been elected secretary-treasurer and director of the Anglo-American Mill Co., Owensboro, Ky. Mr. Young entered on his new duties August 1st.

Mr. and Mrs. Chas. G. Hammond, the latter of the Huntley Manufacturing Company of Silver Creek, N. J., announce the marriage of their daughter, Eleanore, to Dr. Hugh T. Means, on Monday, August 15th, 1910. The home of the groom is in Columbus, Ohio.

New appointments—Frank Kiper, manager Central Granaries Co., Bird City, Kan.; John Sundquist succeeds Hans Hall as agent for the Atlantic Elevator at Forman, N. D.; Ole Lundstrom succeeds Nels Granquist as grain buyer for the Homestead Elevator Co., at Mahnomen, Minn.; James O'Hara succeeds William Klossner as buyer for the Great Western Elevator Co., at Winthrop, Minn.; Ralph Kempf takes charge of the elevator at Welch, Goodhue County, Minn.; W. F. Maywold succeeds F. M. Saum as manager of McGlinn Bros. Elevator at Edgerton, Minn.; Sam Hanson becomes buyer for the Hendricks Co-Operative Elevator Co., at Hendricks, Minn.; Peter King of Geneseo, N. D., succeeds J. A. Black as buyer at the Thorpe Elevator in Lidgewood, N. D.; John Beier succeeds C. H. McGee as manager of the Hammer-Halvorson-Beier Elevator at McHenry, N. D.; R. F. Edmond, superintendent of the Globe Elevator Co., Duluth, Minn., becomes general manager of the Grand Trunk Pacific Elevator Co., Winnipeg, Minn.; A. L. Doeg becomes buyer for the Farmers' Elevator, Lake Park, Minn.; Mr. McDowell takes charge of the Duluth Elevator, Hancock, Minn.; E. L. Stromswold takes charge of the Duluth Elevator Co.'s elevator at Mohall, N. D.; K. A. McRae succeeds John McPhee as buyer for the Lyon Elevator Co., at Edgeley, N. D.; W. E. Ryan, buyer for the Crown Elevator Co., at Odessa, Minn., takes a similar position with the Odessa Farmers' Elevator Co.; L. G. Johnston takes charge of a branch house for a Lincoln, Neb., grain company at Oxford, Neb.; C. L. Olson succeeds G. Anson as local agent for the Western Elevator Co. at Odin, Minn.; Joseph Johnson becomes manager of the Red Lake Falls Milling Co.'s elevator at Thief River Falls, Minn.; Olat Johnson, grain inspector of the B. & M. Elevator in Burlington, Iowa, becomes inspector for a large elevator in Omaha,

HAY AND STRAW

The hay crop in the province of Ontario, Canada, this year is very satisfactory. Most of the crop has been cut.

The J. Walter Sanborn Co., Inc., of Boston, Mass., has been incorporated with \$25,000 capital to deal in hay and grain.

The New York Retail Hay and Straw Dealers' Association will not accept hereafter any hay baled with wooden strips.

Timothy was quoted at \$20 per ton at Duluth, Minn., July 9, but heavier receipts at Minneapolis brought the price down to \$18.

The plant of the Colorado Alfalfa Mill & Power Co. resumes operations August 15, after being closed while improvements were being made.

The alfalfa mill at Frederick, Okla., has suspended operations pending settlement of difficulty between the stockholders and management.

The Checotah Hay & Grain Co., of Checotah, Okla., has been incorporated with \$10,000 capital by M. L. Martin, A. L. Martin, R. O. Smith and others.

An alfalfa mill may soon be established in Deshler, Neb. A. I. Bain, manager of the Fairbury Alfalfa Mill, Fairbury, Neb., has been looking over the field.

In Sherburne and Stearns counties, Minnesota, hay will be about one-third of a crop. In some counties of this section of Minnesota the hay crop will be much better.

Fires have been raging in the hills north of Glenboro, Man., where dry weather has killed the grass. There will be little pasture for the large herds of cattle in that section.

A former resident of Kansas City, but now of Los Angeles, Cal., has been in the Missouri city for the purpose of establishing an alfalfa feed milling plant. The plant would have a capacity from 100 to 150 tons a day.

Send your samples of new hay to the Cedar Point convention addressed to the National Hay Association, Cedar Point, Ohio. Wrap with a burlap and ship on or before August 5th and they will reach destination in ample time.

The hay crop has passed through the drouth with less damage than any other crop in the territory about Green Bay, Wis. The crop is not near as heavy this year as last and the price will run about \$3 higher than last year.

Snow says the hay crop this year in the central West is the smallest for many years. Wisconsin estimated condition 66 per cent of a crop; Minnesota less than half crop; Iowa, 67; Nebraska, 75; Illinois, 83, and Indiana, 79.

The hay crop is larger in New York State this year than for some years and considerably above the average of the past two years, some sections reporting double the amount, while the average increase will be about 30 per cent.

Quebec and eastern Ontario have a splendid crop of hay this season, both quantity and quality considered. Choice old hay is scarce and high priced, whilst the lower grades are plentiful and difficult to dispose of, although offered at low prices.

At the military encampment at Gettysburg, Pa., in July a large number of horses died from a mysterious cause. It has been suggested that the deaths were due to the feeding of green baled hay which when it reached the animals was musty.

Twenty-five members of the Northeastern Hay & Grain Producers' and Shippers' Association met in Fort Wayne, Ind., recently to discuss the hay and grain outlook. The greatest failure in crops was reported in hay. Timothy is poor and in great demand.

Gov. Warner of Michigan has called the attention of farmers of that state to the possibilities of alfalfa, and has suggested the advisability of planting an experimental field of alfalfa in every county of the state in order to properly try out the plant as a state crop.

For the first time in twenty years hay costs more than bran and shorts and the supply of the Northwest has been practically burned out by the recent drouth. Hay is now coming into Minnesota from Kansas, Missouri and Oklahoma. Hay is selling at from \$16 to \$20 a ton.

One of the largest hay crops ever cut in St. Lawrence County, N. Y., is being harvested. The hay is tall and of fine quality. The crop is so large that farmers have not storage accommodation. One farmer has harvested over ninety loads from the same acreage that yielded fifty-two loads a year ago.

The receipts of timothy hay have increased considerably the last few days, but as the demand is active all arrivals are being moved readily at full prices. There is very little demand for the clover grades, pasturage in this section is still in good shape and dairymen will not need to buy hay until later in the fall. A few cars of old timothy if

shipped quickly can be placed at quite a premium over new hay prices. We can report an unchanged market on this commodity, although a few cars of oat straw would probably bring a slight advance. Rye straw is not arriving as freely as at last report and we are having some enquiries for the latter. We do not change quotations.—Pittsburg Hay and Grain Reporter, Aug. 9.

In the western part of North Dakota there is a cuttable territory of 3,000,000 acres of hay, no more than 20 per cent of which will be cut by the settlers for their own use. The crop will average about one-half ton per acre. It is safe to assume that the hay crop in western North Dakota will be worth \$6 a ton on the farm and from \$9 to \$11 at market.

In a letter to J. H. Hall, Commissioner of Agriculture at Helena, Mont., Willis L. Moore, acting Secretary of Agriculture, denied knowledge of a story supposedly emanating from a subordinate bureau of that department, relating to crop conditions in Montana. Crop conditions and acreage are shown at some length, hay alone showing a shortage of 25 per cent.

Up to August 1 no new hay had reached Boston but receivers were quoted as offering \$17 to \$18 for possible arrivals. Old hay was not expected to bring the premium this year that it has in years past, as the regular market prices have been and are so high (neighborhood of \$24) that buyers are awaiting anxiously for the advent of the new crop with hopes of being able to buy lower.

J. H. Harney of Harney Bros., a veteran Chicago hay commission merchant, who has just returned from a trip through the chief hay-producing states, asserts that the hay crop is the smallest in his experience. He states that it is now practically all cut and that rains would be of no benefit. The greatest shortage is in North and South Dakota, Minnesota, Wisconsin, Michigan, Iowa and Nebraska, which will not average half a crop. Stock raisers have been obliged to buy hay for shipment from the southern states to save cattle because of the drouth. In Oklahoma, Missouri, Arkansas and Kansas the hay crop has done much better. The shortage in the hay crop is having its effect on the live stock industry.

SAVING STRAW.

The value of straw is often underestimated. Many farmers overlook it entirely, and allow the straw stack to remain unused. This is a needless waste, for straw may be made to produce profit when it is cared for, say the Indiana Farmer. As a feed it is not very nutritious but stock often consume large amounts of it. When used as bedding it absorbs all the liquid and valuable parts of the manure that might otherwise leach out. It contains considerable potassium, and small amounts of nitrogen and phosphorus. Aside from this when added to the soil it supplies humus.

Many progressive farmers are now coming to use a baler and as soon as the hay is ready it is baled; when this is done the straw may also be baled and handled under shelter with ease.

CANADIAN HAY TRADE.

We learn from advices received here by dealers from all parts of this province and Eastern Ontario that the largest portion of the crop has been gathered in good condition as a rule; but in some instances the hay was badly stained by rain whilst on the swarth. About a fourth of the crop, it is estimated, is still in the field, most of which it is believed will be housed or stacked by August 6. There is a marked scarcity of Nos. 1 and 2 hay, sales of which have transpired by the car load at \$15.00 to \$15.50 for the former and \$14.50 to \$15.00 for the latter, and city buyers of this class of hay have not been able to fill all their requirements. The new hay will not be fit for baling until the latter part of August, although some parties will no doubt risk putting it in bales at the risk of its heating. Although the better grades of old hay are scarce, and command firm prices, the common sorts are in good supply and offered at easier prices.—Montreal Trade Bulletin.

SIGNIFICANCE OF THE HAY CROP.

The shrinkage of the Western hay crop must have a radical and serious effect on Western agriculture. Wheat reserves, and, if need be, the wheat crops of other countries, can be drawn on to make up a passing shortage in cereals, but there is no hidden store of hay, and the lingering effect of shortage may be expected to radiate in many directions. A further handicap will thus be thrown on the great live stock industry, already in precarious position profit margin. The winter feeding will present grave problems in face of the insufficient, expensive and inferior hay. It is not hard to conjecture that 1911 may see even higher prices for cattle, sheep and horses, and sympathetically for hogs, than the records set in 1910. This will follow not only from intrinsically higher

cost of rearing, but from lessened supply through discouragement of many breeders. Such discouragement comes easily when hay rises \$2 a ton in ten days.

The importance of hay may be indicated by the fact that it runs a close race with cotton for second place to corn in total crop value, and ranks ahead of wheat and oats. Its recent record shows:

	Tons.	Value.
1909	64,166,000	\$662,410,000
1908	70,798,000	635,423,000
1907	63,677,000	743,507,000
1906	57,145,959	592,539,671
1905	60,531,611	515,959,784

It is an evil wind, even among crop siroccos, that blows some one no good. This year it is New England, long the despised and rejected in agriculture, that will, with its lush meadows, now safely cropped, make money from the grassless as well as treeless West. New England, in fact, should make a tidy penny from her hay and apples that shall make good the deficits of her Western rivals.—Boston News Bureau.

HIGHEST HAY PRICES.

The following table shows the highest prices for hay in the markets mentioned at this date, Aug. 5, as compiled by the Hay Trade Journal:

	Choice.
Boston	\$25.00
New York	29.00
Jersey City	27.00
Brooklyn	29.00
Philadelphia	24.00
Pittsburg	17.00
Providence	25.00
Buffalo	21.00
Baltimore	23.00
Washington	22.50
Richmond	23.00
New Orleans	21.50
New Orleans Prairie	11.00
Newport News	23.50
Kansas City	14.50
Kansas City Prairie	11.25
Chicago	22.00
Chicago Prairie	15.00
St. Louis	20.50
St. Louis Prairie	14.50
Cincinnati	24.00
St. Paul	19.50
St. Paul Prairie	16.00
Minneapolis	19.50
Minneapolis Prairie	16.00
Cleveland	21.00

Average price per ton for top grades of hay in the leading markets:

EASTERN GROUP.
This week
Last week
Year ago

CENTRAL, WESTERN AND SOUTHERN GROUP.
This week
Last week
Year ago

NATIONAL HAY ASSOCIATION.

The following delegations have been appointed to attend the annual convention of the National Hay Association at Cedar Point on August 23-25:

Merchants' Exchange, St. Louis.—C. F. Beardsley, Fred Deibel, D. W. Clifton, Dan S. Mullally, M. J. Mullally, J. D. Mullally, W. H. Karns, J. M. Fuller, W. A. Miller.

Board of Trade, Chicago.—John R. Leonard, H. H. Freemann, Chas. E. Walters.

The Hay Receivers' Association of Illinois.—J. A. Leonard, C. E. Walters, H. H. Freemann.

Baltimore Chamber of Commerce.—Egil Steen, Walter F. MacNeal, Clarence A. Euler.

Nashville Grain Exchange.—H. H. Hughes, W. H. Crozier, G. W. Hill.

Indiana Grain Dealers' Association.—C. E. Egley, Berne, Ind.; H. H. Deam, Bluffton, Ind.; Guild & Robinson, Medarville, Ind.; Maurice Neizer, Fort Wayne, Ind.

Among those who have engaged rooms at the Breaken, Cedar Point, for the season of the National Hay Association convention are the following: John E. Murray, Fred Able, E. A. Vrooman, C. W. Stutzman and wife, W. F. MacNeal, Frank A. Coles, M. C. Neizer, L. W. Dewey, A. W. Cheney, E. F. Sherman, Fred G. Davis, W. J. Mahood, A. W. Gray, E. M. Dull, J. H. Irvin, L. C. Daniels, Fred B. Strough, R. D. Holloway, Chas. England, M. E. Griffin, S. G. Young and wife, Fred Williams, J. C. Moore, F. M. Williams, G. E. Morrison, E. Vreeland, J. A. McCaffrey, E. B. Dusenberry and wife, H. C. Jones and wife, Harry Kress, E. A. Dillenbeck, J. W. Dusenberry, E. W. Bertholf, George E. Van Vorst and wife, T. S. Lanford, S. Bash and wife, J. F. Kemper, C. A. Coleman, C. F. Beardsley and wife, E. L. Rogers, Chas. Woloham, T. L. Wood, R. L. Green, Gustave Herzer, J. T. Clendenin, J. J. Fairbanks, C. H. Wendling, T. A. Jennings, W. G. Murray, W. C. Watts, W. I. Biles and wife, Chas. J. Austin, B. A. Dean, C. A. Euler, P. E. Goodrich and

wife, G. W. Compton, W. C. Bloomingdale and wife, Irvin T. Fangboner, Harry C. Downey, J. L. Turner, R. P. Lipe, H. G. Morgan and wife, Egil Steen, J. A. A. Geidel, John Yeager, Andrew G. Raub, Mr. Simpson, Harry W. Robinson, James P. Goodrich and wife, A. S. Garman, J. H. Linn, L. H. Phelps and wife, E. M. Wasmuth and wife, J. W. Sale and wife, H. H. Driggs and wife, C. G. Egly, H. S. Grimes and wife, S. W. Kemp, J. Vining Taylor and wife, G. B. Owen, C. H. Springer and wife, G. W. White and wife, C. C. Ramey, J. E. Bergin, J. T. Owens, Gov. Judson Harmon, Fred Deibel and wife.

PROGRAM NATIONAL HAY CONVENTION.

Following is the program of the National Hay Convention to be held at Cedar Point, Ohio, on August 23-25:

TUESDAY, OPENING SESSION, 10 A. M.

Convention called to order.

Invocation—Rev. Melvin T. Ayers, Greenspring, Ohio.

Address of Welcome in behalf of the State of Ohio—Hon. Judson Harmon, Governor, Columbus, Ohio.

Address of Welcome in behalf of Cedar Point—Hon. W. E. Guerin, Sandusky, Ohio.

Response in behalf of the National Hay Association—Smith G. Young, First Vice-President, Lansing, Mich.

Reading Minutes of 1909 Convention.

Report of the President and Board of Directors—Harry W. Robinson, Greenspring, Ohio.

Appointment of Committees.

WEDNESDAY, MORNING SESSION, 9:30.

Report of State Vice-Presidents.

Address, "Hay in History"—J. Ralph Pickell, Chicago, Ill.

Report of Secretary-Treasurer—J. Vining Taylor, Secretary, Winchester, Ind.

Address, "The Hay Business West of the Rockies"—E. A. Clutter, Los Angeles, Cal.

Report of Committee on Grades—L. W. Dewey, Blanchester, Ohio.

Paper, "Reciprocity in Trade"—J. W. Doon, Worcester, Mass.

Report of Committee on Legislation—Egil Steen, Baltimore, Md.

AFTERNOON SESSION, 1:30.

Report of Transportation Committee—Chas. S. Bash, Ft. Wayne, Ind.

Address, "Relation of the Shipper to the Carrier"—Hon. Jas. P. Goodrich, Chicago, Ill.

Report of Committee on Statistics—C. A. Coleman, Savannah, N. Y.

Report of Nominating Committee.

THURSDAY MORNING SESSION, 9:30.

Report of Arbitration Committee—E. M. Wasmuth, Roanoke, Ind.

Address, "Good Fellowship"—John F. Courcier, Toledo, Ohio.

Report of Conservation of Natural Resources Committee—Jas. M. Hait, New York, N. Y.

Address, "Commercial Integrity"—N. W. Cunningham, Bluffton, Ohio.

Report of Standard Bales Committee—Harry W. Kress, Piqua, Ohio.

Unfinished and new business.

Report of committees.

Adjournment.

STATE OF THE HAY MARKET.

The following brief epitome of market reports to the Hay Trade Journal of August 5 indicate the state of the market in leading consuming centers.

New York—The hay market has shown continual advances since last week. Receipts have increased slightly, and trade is of some greater volume due to first of the month buying. Best timothy old crop has sold as high as \$30.00 per ton. Light clover mixed reaches \$24.00, while it is hard to get \$20.00 for No. 2 clover mixed.

Boston—A firm hay market is reported locally owing to the small amount of strictly choice hay offering. The demand for all grades is confined to the immediate needs of the trade and no one is inclined to purchase beyond present necessities. Buyers generally are looking forward to the arrival of new crop hay, which is expected to come on this market the latter part of the month, a little later than usual, when values are expected to rule lower.

Providence—There has been no increase in receipts the past week and this market is practically bare of hay. Prices have advanced again on nearly all grades.

Philadelphia—The receipts of desirable grades of old hay have met with a good outlet at full figures and a few sales have been reported at a premium over quotations if the quality was particularly choice. Much of the supply is however of the under-grades which continued quiet and somewhat irregular in value.

Brooklyn—Receipts of hay have been light and prices show considerable improvement. Long rye straw weaker on increased receipts and light demand. Other grades unchanged.

Jersey City—Receipts were extremely light the

past week, and trade was restricted accordingly. Desirable grades of timothy and light clover mixed show decided gains in values, with supply considerably short of enquiry.

Buffalo.—The arrivals of hay are light and the market firm. No. 1 timothy is scarce and higher. Lower grades are dull. Straw neglected.

Baltimore.—Supplies of old hay are very scarce and with quite a little new hay arriving buyers are beginning to accept it more readily if it is in good condition. Choice old hay is very firm. New stock can be disposed of at about \$2.50 to \$3.00 per ton below prices quoted for old.

Washington.—Old hay is in fair demand at slightly higher quotations. Quite a little new hay is being offered for prompt and August shipment basis \$18.00 to \$18.50 for No. 1 timothy.

New Orleans.—Receipts were light several offerings of new timothy at cheaper prices has caused the market to weaken 50c per ton, but prices are holding very firm at this figure and we look for no further decline in the next ten or fifteen days. Clover mixed is quiet. Clover unsalable and no grade on its merits. Louisiana, Oklahoma and Texas on their merits. The demand for prairie is fair.

Richmond.—With light receipts, the market is bare of stock, and all grades of old hay are in demand at quotations. While no new has been offered as yet, a few cars will bring within one dollar per ton of the quotations for old.

Chicago.—There was quite a run of new upland hay from Kansas during the past week and the market is easier in consequence. There is all new timothy here that can be taken care of and trade is very quiet and quotations somewhat lower. Old timothy is about all gone, and straw is getting scarce and is wanted. Choice new timothy is selling at from \$16.00 to \$16.50.

St. Louis.—High-grade old timothy is scarce, strong in price and in demand, but medium and lower grades and new hay are quiet and steady. Prairie is in large offering, slower sale and weak. New clover is dull and weak. No. 1 alfalfa is quiet and steady, lower grades dull and weak.

Kansas City.—Hay has been in fairly active request during the week and prices on timothy are firm under ready sale. Low grades of alfalfa are ruling weak. Prairie hay has been fairly ample supply. More straw is offering than the demand requires and prices are lower.

DID HE LOSE HIS FAITH?

The one time in the last three years that Mr. Patten failed to stand his ground he lost—and needlessly. His losses were not severe, for him, and were very much less than generally estimated, being, in fact, less than \$225,000, which, he philosophically observed, were more than made up by his profits in corn.

It was in the latter part of April that the writer in conversation with Mr. Patten observed that there was a considerable feeling of superstition concerning him. His success in everything up to that time—wheat, corn, cotton—seemed to justify it. Yet at that time it appeared as if the only bullish factor in the situation, so far as new (September) wheat was concerned, was Mr. Patten himself. "I sure am in the wrong at present," was Mr. Patten's whimsical reply as he proceeded in a rather half-hearted way to justify his position. Evidently he had little faith in what he was saying, for it was not long afterward that he let go. And yet had he pursued his usual policy of standing his ground to the end there would have been some justification for a superstitious belief in his infallibility. September wheat has since exceeded the former high price by 1 1/2c. Mr. Patten, however, was scheduled to retire on July 1 and he did so. Otherwise, his friends declare, he would have been held responsible for the damage in the Northwest.—N. Y. Journal of Commerce.

The next agricultural census in Canada will be taken in 1911.

The mutual hail insurance companies of North Dakota will include corn in their risks hereafter.

The Farm Hands' Union has been organized in Washington, whose purpose is to raise harvest labor wages to \$3.50 per day of eight hours. The scale for sack-sewers and forkers is fixed at \$5 a day, while the pay of machinemen will be increased from \$6.50 to \$7 up to from \$10 to \$12 a day. Several previous attempts have been made in Washington and Oregon to organize farm laborers, but so far they have not been successful.

The Waco Business Men's Club will co-operate with the Government agents in establishing in McLennan County, Texas, a demonstration farm to be devoted particularly to corn culture to be managed, in part, by the Boys' Corn Club of McLennan County. The plan submitted by B. M. Anderson, special agent of the United States Agricultural Department, has been indorsed by the Business Men's Club and the McLennan County Farmers' Institute.

OBITUARY

J. Monroe Gaut, formerly in the grain business in Knoxville, Tenn., died of cerebral hemorrhage in that city July 23, aged 59 years.

Charles N. Burkhart, who was wheat buyer for the Jacobi Elevator Co., in Hallock, Minn., some years ago, died in Norwich, N. D., recently, aged 51 years.

Jonathan P. Marston, for many years engaged in the hay and grain business in Malden, Mass., died at the home of his sister in Dorchester, Mass., recently, aged 81 years.

J. C. King, one of the most prominent elevator owners in Canada, and an alderman of Port Arthur, Ont., passed away suddenly of paralysis in that city July 30, aged 74 years.

A. E. Peterson, grain buyer at Vegaville, Alta., passed away July 21 as the result of paralysis. The remains were buried in Hallock, Minn., where decedent's parents reside.

Charles Bluhm, in the grain and grocery business at Holden, Mo., and for forty years a resident of that place, was stricken with apoplexy while serving as pall-bearer at a funeral July 25 and expired a few hours later. He was a native of Germany and is survived by ten children.

Charles E. McGowan, grain and lumber dealer of Milbank, N. D., died in Minneapolis, Minn., July 8 following an operation for appendicitis. He had accompanied his father to Minneapolis, the latter to undergo treatment for cancer. Decedent was 50 years old and is survived by his widow, three daughters and his father.

Joseph Vollkommer, Sr., senior member of the firm of Vollkommer & Co., dealers in hay, grain and horses in New York City, and at one time the largest hay buyer in the metropolis, died at Saranac Lake, N. Y., recently of diabetes. Decedent at one time was associated with W. C. Bloomingdale, of the American Hay Co., under the firm name of Vollkommer, Bloomingdale & Co.

James McAlpine, veteran member of the Milwaukee, Wis., Chamber of Commerce, and one of the leading export shippers of grain from that city in the early days, died July 20 from heart failure. He was a native of Scotland and came to this country when twelve years old. He served in the Civil War and was mustered out as a lieutenant. He is survived by his widow, one daughter and one son.

Caleb C. Crane, secretary-treasurer of the Washburn Elevator Co., died August 1 in Minneapolis, Minn., as the result of a complication of diseases. He was secretary-treasurer of the North Star Cereal & Feed Co., also of the Washburn Steel Casting & Coupler Co. He was one of the first settlers of Austin, and had been a resident of Minneapolis forty years. Decedent is survived by his widow and one son, Archibald A. Crane, vice-president of the Northwestern National bank of Minneapolis.

Charles Lapsley Bonner, pioneer grain dealer of the Northwest, died in Winona, Minn., recently. He was born in Mt. Pleasant, Pa., in 1841, and at the age of 21 years engaged in the grain commission business at Winona, Minn. Later he was a member of a firm that operated a line of elevators along the Milwaukee road. He was also one of the promoters of the Winona Milling Co. At one time he operated in grain on the Minneapolis Chamber of Commerce. Decedent is survived by his widow, one daughter and two sons.

Charles Kaestner, manufacturer of milling, elevator and brewing machinery in Chicago for half a century, passed away at his home in that city, August 6, aged 83 years. He was born in Neustadt, Saxony, in 1826 and came to Chicago in 1853. For four years he worked at his trade as a millwright and in 1857 established a contracting business. In 1863 he began the manufacture of milling machinery and two years later branched out to elevators and brewing machinery, continuing to the time of his death. He was said to be the oldest member of the Ancient Order of United Workmen. Decedent is survived by his widow and five children.

Thomas E. Wells, of the Chicago Board of Trade firm bearing his name, passed away in Birmingham, Eng., August 3 as a result of appendicitis. He was on his annual visit to his prize stock farm at Broadway, about fifty miles out of Birmingham. He had been ill but three days. The remains were brought to Chicago for burial. Decedent was born in Birmingham, Eng., fifty-four years ago and came to the United States when a young man. He began work in Chicago as a bank messenger. He became a factor in banking circles and in 1903 engaged in the commission business. He was a director in the Quaker Oats Co., and two years ago was vice-president of the concern. For the last few years he had not been active in business.

It is said that Geo. S. McReynolds may soon be released from Joliet on parole by Geo. E. Shipman of the insurance brokerage firm of Shipman & Wayne, Chicago.

TRANSPORTATION

The Canadian Minister of Railways, Hon. G. P. Graham, at Saskatoon, Sask., assured a meeting of grain growers on July 16 that the Hudson's Bay line will be built in a few months' time.

The I. C. has published a new tariff on grain from Illinois points to E. St. Louis and St. Louis effective August 31, which advances the rate to St. Louis 1c. as compared with E. St. Louis.

Effective Aug. 25, as per supplement 1 to its tariff G. F. D. No. 39-B, the Chicago Southern Railway will apply a rate of 4½c per 100 pounds to Chicago from its stations Faithorn to Quaker, Ill., inclusive, on grain reshipped via lake.

The following roads have consented to discontinue the deduction of ¼ of 1 per cent on corn and ½ of 1 per cent on other grains, effective August 1: Chicago, Rock Island and Pacific Railroad, Atchison, Topeka and Santa Fe Railroad, Chicago, Burlington and Quincy Railroad.

A conference is to be held at Ottawa in the near future between Chairman Martin A. Knapp, of the Interstate Commerce Commission, and the Hon. J. P. Mabee, chief of the Railway Commission of Canada, who are to discuss the advisability of creating an international commission on railroad rates. Such a conference will have a peculiar interest for grain dealers interested in the export trade.

The Commerce Commission, in order to make clear any increases that may appear in new railroad tariffs as filed has ordered that on and after September "all tariff publications, classifications or supplements thereto filed with the commission must indicate by the use of black-faced type, or by the use of symbols with proper footnote explanations, all changes in rates, fares, or charges which are increases over rates, fares or charges formerly in effect."

The Commerce Commission has ordered that when a tariff publication, classification, or supplement thereto is suspended, the carrier shall, by itself or agent, upon receipt of lawful notice of such suspension, immediately post at its stations and file with the Commission, on one day's notice, a supplement stating that such tariff publications, classifications, or supplement thereto, are under suspension, and that the rates therein contained will not be applied or charged until further notice, or until such specified dates as the suspension order of the Commission may name.

The Atchison, Topeka and Santa Fe railway has announced that effective on Sept. 1, 1910, the rates on bulk grain to Chicago from Kansas City, Atchison and St. Joseph, Mo., when originating beyond those points, will include delivery of bulk grain to lake boats, for which service an allowance of not exceeding ½c per bu. will be made to elevators performing the service. The Chicago and Alton railroad, Chicago Great Western railroad, and other Kansas City-Chicago lines have indicated their intention of issuing similar tariffs, the dates of effectiveness of which will be announced later.

The Commerce Commission will begin a hearing at Chicago on August 22 upon the question of advancing all freight charges. As increases of rates must be justified by commercial conditions, according to the amended Hepburn act, the railroads will try to convince the Commission that they are not earning fair profits and should be allowed a general and marked advance in rates. Opposing them will be an army of shippers and shippers' organizations, contending that the raise demanded is not justified by the financial condition of the carriers. Meanwhile all proposals to increased rates are suspended by the Commission.

At the conference of counsel to the railroads, of the U. S. at Newcastle, N. H., on August 4, Edgar J. Rich, general solicitor for the Boston & Maine, speaking on the export rate among other things said: "A ruling by the courts that the railroads could not make a lower rate for export freight would mean that several industries, such as steel, coal, meat and grain would be placed in a position where they could not meet foreign competition. It would mean that the country could not market its surplus, and there would be idle mills, thousands of men out of employment and stagnation and ruin to thousands." After considering the subject through two days the conference authorized this statement: "It is understood that the general sentiment of the country is that such an interpretation is not justified by the spirit or even by the letter of the act, and there is substantial unanimity of opinion that no disarrangement of our foreign business will result from complication with the act."

FAILURE TO POST TARIFF.

The Canadian Valley Grain Co. obtained reparation for overcharge against the Rock Island for failure of the latter to post tariff promptly at Calvin, Okla. The rate of the new tariff on snap corn was advanced 4c. per 100 lbs.

The complaint to the Commerce Commission

turned upon the fact that the tariff that became effective on March 13, 1908, although filed with the Commission, had not been posted for public inspection at Calvin before these shipments moved (on March 18). A copy of the tariff had been mailed to the agent of the principal defendant at that point with directions to post it in the freight-receiving station, but seems not to have been received by him; and not knowing therefore that the rate on snap corn had been advanced he billed out both carloads at a rate of 19 cents per 100 pounds. The corn had been sold f. o. b. destination on the basis of that rate, which the tariffs still on file at Calvin indicated as the rate then in effect. They assert that had they known that 23 cents was the legal rate the freight charges could and would have been included in the f. o. b. price at destination. The loss made good was \$27.84.

MILLING-IN-TRANSIT.

A tentative schedule of milling-in-transit rules was drawn up at Chicago on July 20 by the vice-presidents of the Western lines and shippers' representatives from the Southwest, which if approved by the Commerce Commission and published by that body will be made the universal basis of transit.

These rules will apply to grain, grain products, hay, straw, seeds, etc. They are based on I. C. C. Rule 76-A and Circular 17-A, and also the clause—"To surrender the inbound expense bills on the acceptance of transit privilege constitutes a declaration by the shipper that the shipment thus tendered is entitled to transit privileges."

The schedule fixes (1) a definite basis for shrinkage; (2) points at which transit will be granted; (3) points where products originate which will be given transit privileges; (4) points to which products taking transit may be forwarded; (5) products which may be granted the transit privilege.

Where grains or seeds are cleaned in transit, unless otherwise specified, the shipper when making outbound shipment shall specify the loss resulting from said cleaning and offer for cancellation inbound billing to cover such loss. Where ear corn to be milled or shelled takes the privilege, the receipt of the shelled corn in outbilling shall be based on a minimum allowance of 20 per cent for weight of the lots.

(6) Time limit: For inspection, 72 hours (subject to demurrage); for manufacture, cleaning, etc., one year.

(7) Records of receipts and shipments shall be kept on forms to be approved by the carriers and shall be sworn to when affidavit is asked for.

(8) The records and the traffic shall be subject to inspection by representatives of the carriers, who shall have power to compare expense bills and verify all records of shippers and elevators and cancel excess inbound bills.

The object of the schedule is to protect the through rate or one based thereon; and the stipulations are all drawn with that end in view.

MILLING-IN-TRANSIT RULING.

The Commerce Commission recently passed upon an interesting phase of "transit" in the case of David Stott of Detroit vs. the Mich. Cent. R. R. Co. et al. Mr. Stott, who is a miller at Detroit, grinds wheat brought by water from Duluth and ships the products by rail to Eastern destinations. He complained that the carriers charged him a higher rate on flour from Detroit eastward than they charged on wheat brought to Detroit by water and reconsigned east to millers who are also given "transit" privilege.

The defendant carriers justified their rates on the plea of competitive necessity. If grain moved to Detroit by water is to go on east by rail from that point, the rail rate from Detroit cannot be materially higher than from Buffalo, since the water rate to Detroit is seldom lower and frequently is higher than to Buffalo; and the ex-lake rate complained of was established for the purpose of inducing the movement of grain eastward through ports like Detroit, Port Huron, etc.; but even so the amount of the traffic is comparatively small.

The Commission therefore say: "These contentions of the defendants are in the main well founded. The rates are competitive and could not be made higher. The complainant would not be benefited if the rates on wheat were entirely withdrawn. Nor would he probably derive any benefit from eliminating from those rates the milling-in-transit privilege. The result would be that the Eastern miller would obtain his wheat at the same price through Buffalo, with transit privilege."

Various other questions of detail involved in the complaint are considered, but these are dismissed with the general statement that it is apparent that Detroit is not favorably situated as a lake milling point, for the reason that the rate on its grain from Duluth is as high as to Buffalo, while it has no lake-and-rail rate upon its flour east like that from Duluth. "Still," say the Commission, "it would be our duty to give it the benefit of its water transportation if we could devise any way in which

that could be accomplished without serious interference with rates in other directions. We can suggest no improvement in the present situation. Whatever discrimination the complainant suffers, if any, is necessary and cannot be pronounced undue. The complaint was dismissed.

BILL OF LADING REFORM.

A conference of bankers and railroad men in New York in July resulted in a decision to send a committee of five bankers to Europe immediately to lay before bankers of England and the Continent a new agreement reached, which, it is hoped, will satisfy the European bankers who have refused to negotiate American cotton bills of lading after November 1 unless guaranteed by a banking institution.

The plan proposed was an agreement reached at a meeting of representatives of the railroads east of the Mississippi River, held at White Sulphur Springs, W. Va., on July 19. It provides for the issue by the railroads of a bill of lading signature certificate which is to be attached to each bill of lading, whereby the railroad certifies the signature of its authorized agent to the bill of lading covering the specified number of bales. In the case of through export bills of lading, agents will sign them only when cotton is in the possession of the railroad company, or upon the presentation of loading certificates by authorized agents of compressor warehouse companies.

The practice of issuing duplicate and triplicate bills of lading will be discontinued. Only one will be issued, but copies will be made subject to the indorsement, "Copy, not negotiable." A copy of each bill of lading will be forwarded to the agent of the water carrier at the port of export on direct shipments or the port of transhipments on indirect shipments. Shippers will be required to accept the conditions of the bills of lading by attaching their signatures. Numerous other technical regulations to check frauds are also provided.

THE KEYSTONE ELEVATOR HEARING.

The Commerce Commission hearing of the complaint lodged against the Pennsylvania Railroad for favoritism to the Keystone Elevator Co. at Philadelphia began on July 14 and was concluded on July 15. Commissioner Clements presiding and John H. Marble and S. H. Smith, acting as the Commission's attorneys. There was an array of attorneys on the other side representing the Keystone Elevator Co., the Pennsylvania Railroad, L. P. Shute, a retail grain dealer, and the Retail Feed and Grain Dealers' Association. The latter on the evening before the investigation began had adopted the following resolution:

"This association desires to make known to all whom it may concern that the management of the Keystone Elevator and Warehouse Company has been to the entire satisfaction of the members of this association, and that we have received nothing but fair and courteous treatment at the hands of the Keystone Company, and that the members would regret that anything be done to interfere with the combination and control and operation of the said company."

Mr. Marble, who conducted the enquiry, introduced witnesses to prove the following general propositions:

(1) That Keystone Elevator and Warehouse Co. was virtually the private property of Harvey C. Miller, the chief factor in the firm of L. M. Miller & Sons.

(2) That grain shipped to Philadelphia goes there billed either for export or domestic trade, and that by agreement between the Keystone Company and the Pennsylvania Railroad there are two rates—one for export grain and one for domestic grain.

(3) That all the grain going into Philadelphia by way of the Pennsylvania Railroad enters Philadelphia's gates at Fifty-third Street, and that 80 per cent of the Keystone's grain goes to the elevator for "treatment," the balance, if intended for export, going direct either to Washington Avenue wharf or to the Girard Point elevators, which two points do an export business absolutely.

(4) That in the transfer at Fifty-third Street many of the export grain and the domestic grain cars lose their identity and all of them, under the general head of "grain for treatment," are shunted to North Philadelphia, where, so far as anybody outside the Keystone Company is concerned, the grain is completely lost in one great elevator; and therefore, by virtue of this fact, export and the import grain becomes fused and confused—first in the cars at Fifty-third Street and then at the elevator at North Philadelphia, and that the rates also become confused.

(5) And that in the confusion it was entirely possible to use this grain brought in under export rates for domestic shipment, thus enabling the Keystone Company to sell grain at such reduced figures that no other city in the East could compete with Philadelphia.

He put on the stand Supt. John A. McLaughlin,

Sec'y H. C. Valentine, President Walter F. Hagar, and various freight agents.

At the conclusion of the testimony Commissioner Clements said in substance:

"There are several points to be established before the commission can render a decision," he said. "Has the Pennsylvania Railroad given rebates, directly or indirectly, on Keystone shipments? Can the testimony produced be construed to mean that the alleged shuffling of shipments and rates was a part of a plot to enhance the business of the Keystone Elevator and Warehouse Company to the financial restriction of other dealers? Has the evidence presented at this hearing indicated that the integrity of the rates on grain depended entirely on the Kekstone's statement of what the car contains? Does this not give an opportunity for some one to change the billing of what the cars really contain?"

Since the hearing S. F. Scattergood & Co., Philadelphia, have filed (August 3) with the Commission a complaint that the Keystone Company is paid "elevator allowances by the Pennsylvania Railroad, which gives the Keystone Company undue advantage over competitors."

It also is complained on 'change that the grain going into Philadelphia through the North Philadelphia station of the Pennsylvania Railroad has not been inspected. It was said by President McKnight of the Commercial Exchange that testimony showed that the grain committee had received \$12,000 less for their work than the sum which should have come to them as estimated by the number of carloads of grain delivered through the Keystone Elevator. He said that it had been asserted by Bernard Devit, a member of the board of directors of the Exchange, that the Pennsylvania Railroad had refused to give the car numbers to the inspectors, and it was therefore impossible for them to locate the cars.

It was announced (but we have not had confirmation of the fact) that on August 11, at the regular meeting of the directors of the Commercial Exchange that additional charges would be presented by local grain men, with the request that the Exchange file them with the Commerce Commission alleging rebates, etc.

GENERAL REVIEW OF CROP CONDITIONS.

The month of July was unfavorable for crop growth, taking the United States as a whole, the deterioration being about 4.2 per cent, as compared with an average decline of 2.3 per cent during July, says Victor H. Olmsted, Chief of the Bureau of Statistics. Aggregate crop conditions in the United States on August 1 were 6.5 per cent lower than on August 1 a year ago, and about 5.3 per cent lower than the average condition on August 1 of the past ten years. However, the area under cultivation is about 3.2 per cent more than last year. Conditions average highest in New Hampshire, 25 per cent above the average, due largely to good hay prospect; and average lowest in North Dakota, 59 per cent below the average, due to severe drouth affecting all crops.

By states, the aggregate of crop conditions on August 1 (100 representing the average on August 1 of the past ten years) as follows:

Maine 122; New Hampshire 125; Vermont 119; Massachusetts 111; Rhode Island 101; Connecticut 108; New York 111; New Jersey 102; Pennsylvania 104.

Delaware 108; Maryland 105; Virginia 106; West Virginia 99; North Carolina 99; South Carolina 98; Georgia 95; Florida 94.

Ohio 103; Indiana 105; Illinois 101; Michigan 93; Wisconsin 75; Minnesota 85; Iowa 92; Missouri 103; North Dakota 41; South Dakota 81; Nebraska 86; Kansas 97.

Kentucky 98; Tennessee 104; Alabama 100; Mississippi 103; Louisiana 103; Texas 106; Oklahoma 88; Arkansas 101.

Montana 83; Wyoming 74; Colorado 86; New Mexico 85; Arizona 100; Utah 94; Nevada 102; Idaho 91; Washington 88; Oregon 106; California 111.

The condition of various cereal crops in the United States on August 1—100 representing for each crop, not its normal condition, but its average condition on August 1 of recent years (10-year average for most crops)—was as follows: Winter wheat (yield per acre), 110.5; clover (production compared with average production) 105.5; rye (yield per acre) 101.8; hops 100.1; oats 98.7; rice 98.2; broom corn 96.7; corn 96.6; buckwheat 96.5; hay 95.2; sorghum 93.6; alfalfa 90.1; barley 82.1; pasture 81.8; kaffir corn 81.6; millet 80.3; spring wheat 74.5; flax 58.5.

Flax seed has again been breaking its own records, doing so twice within a week at Minneapolis, when the then record price of \$2.55 per bu. on July 17 went to \$2.65 on the 22d. There were sales also at \$2.60 and \$2.61. The trades were for cash flax, the cars being in the Minneapolis railroad yards. On the 30th, however, the price advanced 26c. in one day, touching \$2.82.

FIRES-CASUALTIES

The elevator of Belden & Co., at Charlotte, Mich., was slightly damaged by fire July 25.

Fire in the grain warehouse of E. G. Duckwall & Co., Louisville, Ky., recently wrought damage to the amount of \$5,000.

Lightning struck an elevator at Kief, McHenry County, N. D., recently and it was destroyed by fire that followed.

The elevator of the Northwestern Malt & Grain Co., at Cragin, Chicago, was destroyed by fire July 24. Loss \$150,000.

The Farmers' Elevator at Waukomis, Okla., was destroyed by fire recently. It had not been in operation for some time.

The Solomon Grain Co.'s Elevator at Solomon, Iowa, was struck by lightning recently and damaged to the extent of \$125.

The Western Elevator Co.'s structure at Dodge Center, Minn., was destroyed by fire August 3, resulting in a loss of \$5,000.

The elevator of Bingham Bros., at Fox Lake, Martin County, Minn., was struck by lightning recently and badly damaged.

The grain elevator of Logan Bros. & Hadden at Lexington, Ky., was destroyed by fire recently, resulting in a loss of \$12,000.

Grain to the value of \$50,000 was destroyed by a fire that started on the Davis ranch near Sycamore, Colusa County, Cal., recently.

The Powers Elevator at Driscoll, N. D., was destroyed by fire of unknown origin July 27. Other buildings were also destroyed.

The elevator of the Central Granaries Co., at Hoag, Neb., caught fire from sparks from a locomotive recently and suffered slight damage.

A grain elevator, freight cars loaded with grain and fruit and a condensed milk plant were destroyed by fire in Walworth, Wis., recently.

Fire of unknown origin destroyed the warehouse of H. U. Crockett, dealer in grain, tallow and hides at Clinton, Iowa, July 29. Loss \$30,000, well insured.

A bucket brigade fought a fire that destroyed the Beggs, Lynd & Husmann Elevator in Tallula, Ill., Aug. 2. The Chicago & Alton depot was also destroyed.

A frame building containing hay, feed and straw in Bristol, Washington County, Va., and owned by Hamilton-Bacon-Hamilton Co., was destroyed by fire July 20.

The grain storehouse of Godfrey & Sibbald at Owen Sound, N. W. T., Canada, was destroyed by a fire believed to be of incendiary origin July 22. Loss \$7,000.

A grain elevator at Shindler, the first station east of Sioux Falls, S. D., was struck by lightning July 22, fire followed and the structure was damaged to the amount of \$300.

Fire believed to have been started by tramps destroyed the McCaull-Webster Elevator at Rauville, Codington County, S. D., July 16. It contained 15,000 bushels of grain.

The McCabe Co.'s Elevator at Beverly, thirty miles south of Brandon, Man., was destroyed by fire recently. The structure contained 3,000 bushels of wheat. The loss is total.

Fire that started in an adjoining warehouse destroyed the Bushnell Elevator in Junction City, Ore., July 27, resulting in a loss of \$10,000. Other buildings were also destroyed.

The lake freighter Parks Foster, bound for Collingwood, Ont., with 98,000 bushels of corn, was delayed in the Chicago river for one week by some mysterious accident during July.

Fire believed to be due to spontaneous combustion destroyed the old Globe Elevator in Buffalo, N. Y., August 10, resulting in a loss of \$130,000. The elevator was filled with wheat.

The big warehouse of the James Frazee Milling Co., at Baldwinsville, N. Y., was destroyed by fire July 22, entailing a loss of \$10,000. It is believed the fire was of incendiary origin.

Fire of unknown origin destroyed the Cahill Elevator & Lumber Yard and several buildings at La Motte, Dubuque County, Iowa, recently. Loss on elevator and lumber yard \$6,000.

Several hundred bags and nearly a score of barrels of flour were precipitated to the ground when a side of the storehouse of the Taunton Grain Co., Taunton, Mass., collapsed August 2.

Fire believed to be of incendiary origin destroyed the Gardner Elevator at Oxford, Mich., August 3. The structure contained 1,700 bushels of wheat, 900 bushels of rye and 300 bushels of oats.

Fire believed to have been started by tramps destroyed the elevator of the Eagle Roller Mill Co., at Fairfax, Minn., July 18. The engine house was saved. The capacity of the elevator was 25,000

bushels. Loss on building \$5,400, with \$3,500 insurance; loss on grain, \$10,000, covered by insurance. The Eagle Roller Mill Co. will purchase the elevator in Fairfax owned by the Great Western Elevator Co.

A hot box in the upper portion of the structure started a fire that destroyed the elevator of the Farmers' Elevator Co. in Washburn, N. D., July 27. About 10,000 bushels of grain were consumed.

Fire that broke out in the Hettinger Elevator at Secor, Ill., recently, destroyed that structure, a depot, post office and other buildings. The elevator contained much grain. The total loss is about \$20,000.

Fire believed to be of incendiary origin destroyed the elevator of the Lillie Flour Mill at Franklin, Tenn., July 14. The structure cost about \$25,000 and was insured for \$10,000. But little grain was destroyed.

The W. F. Markham Elevator at Lansing, Mower county, Minn., was struck by lightning August 1 and burned to the ground. It contained 2,000 bushels of wheat. Loss \$5,000, about covered by insurance.

While hoisting a sack of grain in a warehouse at Willows, Glenn County, Cal., July 22 Claude F. Killebrew barely escaped death when the pulley gave way and the grain descended on his head. He was rendered unconscious.

The Probasco Grain Elevator in Bloomington, Ill., was destroyed by a fire believed to have been started by a spark from a locomotive and which was discovered in the roof of the building July 23. Loss on elevator about \$2,000.

A bucket brigade fought a fire that followed a bolt of lightning at the R. F. Cummings Grain Co.'s Elevator at Martinton, Ill., recently. The bolt struck the cupola and tore its way to the basement. The elevator was badly damaged.

The plant of the Updike Grain & Coal Co., at McCook, Neb., was destroyed by fire of unknown origin July 18. About 12,000 bushels of oats, 8,000 bushels of corn and about 500 bushels of wheat were consumed. Loss about \$30,000, covered by insurance.

Sparks from a locomotive are believed to have caused a fire that destroyed the William Large Elevator at Wing, Livingston county, Ill., recently. The elevator owned by J. M. Feely was saved by a bucket brigade. The loss is covered by insurance.

Three forest fires in twenty-four hours in the vicinity of Crossfield, Alta., recently caused suspicion that they were of incendiary origin. The most serious blaze was the one that destroyed the Imperial Elevator, containing 10,000 bushels of wheat.

Fire of unknown origin destroyed the Lewisburg Grain Co.'s building in Lewisburg, Tenn., owned by J. B. Wilhoite & Son, July 31, and also a number of other buildings. A large amount of grain was destroyed. Loss on building \$4,000, with \$3,000 insurance.

The grain and feed building of J. P. Duffy at Driscoll, N. D., was destroyed by a fire believed to have been started by tramps July 25. The building was well stored with hay which made it difficult for the fire department to combat the flames. Loss \$2,500, with \$1,350 insurance.

Fire which broke out in the Minnesota Furniture Frame Co.'s factory in Minneapolis, Minn., July 29, destroyed that structure and also the Crescent Elevator adjoining. The origin is unknown. A bucket brigade prevented the flames from communicating to nearby residences. There was no grain in the elevator. Loss on elevator \$50,000, with \$35,000 insurance. The elevator, which was owned by the Van Dusen-Harrington Co., will not be rebuilt.

Sparks from a locomotive or spontaneous combustion caused a fire that destroyed the elevator and plant of the Seeds Grain & Hay Co., in Columbus, Ohio, July 19. Loss on building \$20,000, with \$10,000 insurance. Loss on contents \$7,000, with full insurance. The fire department was hampered by low water pressure. The elevator contained 5,000 bushels of shelled corn and 1,000 bushels of oats. The elevator of the Hardesty-Williams Milling Co., nearby was threatened.

With the price of corn at \$4.70, the present high rent of land, and heavy cost of labor, the position of the colonist today is anything but an enviable one. In the vicinity of Rosario where the rent is so high it is reckoned that a yield of 40 quintales a square would barely suffice to cover expenses. We have not seen maize below \$5 for so long a time that the possibility of it experiencing such a drop has not been seriously considered, consequently whatever rental landowners have been pleased to fix has been accepted by the lessee. With practically no linseed left and little wheat, some compensation was expected from maize, but, however large the crop be, it is certain that at present prices the outlook is a poor one.—"Review of the River Plate," June 8.

CROP REPORTS

Crop conditions have been growing brighter in North Dakota, notwithstanding that an almost total failure was predicted. Barley and oats have been the heaviest sufferers from drought.

Missouri is the fourth largest corn producer according to the August crop report. Corn condition 82, against 76 in July and 88 last August. Oat crop 25,700,000 bushels, the largest in years.

The Kentucky August crop report shows that corn has suffered a further decline. Condition is given as 70, against 74 in July and 86 last September, when the crop turned out 103,000,000 bushels. Oats in fine condition.

H. B. Dorsey, former president of the Texas Grain Dealers, states that the corn crop in that state this year will show the greatest yield in years. In some sections the crop is poor, as rains have been scattered.

H. V. White, president of the Pennsylvania State Millers' Association, asserts the crops of Pennsylvania this year are perhaps the largest ever harvested. The oats crop is unquestionably the largest ever grown.

While Western Canada will not harvest a "bumper" crop this year there will be plenty of grain for export and the quality will be above the average. The oat crop will be light and barley generally unsatisfactory.

The crop report for Germany, which shows conditions up to July 15, gives a slight depreciation. The grain market has been strong, influenced by excessive rains. It was feared the rains would interfere with the harvest.

A special report issued by the Wisconsin State Board of Agriculture gives the condition of corn 78 on August 1. Oats will yield better than expected, while corn planted on fertile land and well cultivated has shown remarkable vitality.

The Oklahoma August crop report makes the condition of corn 64, against 85 in July, but estimates the probable crop at 100,000,000 bushels. Condition last August was 64. Thirty-one counties in the east and southern sections report condition of corn the best in years.

According to a recent report issued by the State Board of Agriculture of New Jersey the oats crop is the best in years. The prospects for a full corn crop are threatened by drought. The indications are that there will be an average yield of wheat, rye and grass for hay.

The Ohio August crop report gives no percentage on corn, but the outlook is encouraging, although some sections complain of drought. Oats 108 per cent, against 104 in July, and 92 last August, when the crop turned out 51,000,000 bushels. Timothy prospect 52 per cent.

THE GOVERNMENT REPORT.

The Crop Report of the Bureau of Statistics estimates that the average condition of corn on August 1 was 79.3, as compared with 85.4 last month, 84.4 on August 1, 1909, and 82.1 the average on August 1 for the past ten years. Comparisons for important corn states are as follows:

States—	in State.	Per Cent			Ten-year Average.
		of U. S.	CONDITION.	Acreage	
Illinois	9.3	84	91	84	
Iowa	8.3	80	85	84	
Texas	7.9	78	60	73	
Kansas	7.8	60	90	76	
Missouri	7.2	82	88	80	
Nebraska	7.1	65	93	82	
Oklahoma	5.1	57	63	78	
Indiana	4.5	87	94	85	
Georgia	4.0	87	90	87	
Ohio	3.5	86	90	85	
Tennessee	3.3	87	78	82	
Kentucky	3.2	84	87	85	
Alabama	3.1	91	76	82	
Mississippi	2.8	91	69	76	
North Carolina.	2.7	85	78	86	
Arkansas	2.5	89	76	79	
Louisiana	2.2	94	88	81	
South Carolina.	2.1	86	84	82	
South Dakota..	1.9	86	92	86	
Virginia	1.9	89	77	88	
Michigan	1.8	76	85	82	
Minnesota	1.5	82	91	83	
Pennsylvania ..	1.4	88	85	85	
Wisconsin	1.4	70	82	83	
United States..	100.0	79.3	84.4	82.1	

Preliminary returns indicate a winter wheat yield of about 15.8 bushels per acre, or a total of about 458,294,000 bushels, as compared with 15.8 and 446,366,000 bushels, respectively, as finally estimated last year.

The average condition of spring wheat on August 1 was 61.0, as compared with 61.6 last month, 91.6 on August 1, 1909, and 81.9 the ten-year average on

August 1. Comparisons for important spring wheat states are as follows:

States—	in State.	Per Cent			Ten-year Average.
		of U. S.	CONDITION.	Acreage	
North Dakota..	36.6	34	93	79	
Minnesota	29.8	77	92	83	
South Dakota..	18.5	70	92	83	
Washington ..	4.2	62	90	85	
United States..	100.0	61.0	91.6	81.9	

The average condition of the oat crop on August 1 was 81.5, as compared with 82.2 last month, 95.5 on August 1, 1909, 76.8 on August 1, 1908, and 82.6 the ten-year average on August 1. Comparisons for important oat states are as follows:

States—	in State.	Per Cent			Ten-year Average.
		of U. S.	CONDITION.	Acreage	
Illinois	13.0	90	90	79	
Iowa	12.5	93	81	84	
Minnesota	8.0	65	89	85	
Nebraska	7.6	78	80	78	
Wisconsin	6.7	69	84	87	
Indiana	5.5	92	92	82	
Ohio	5.1	93	91	86	
North Dakota..	4.7	27	92	80	
Michigan	4.4	80	81	88	
South Dakota..	4.3	67	91	89	
New York.....	3.9	94	80	89	
Kansas	3.4	92	88	67	
Pennsylvania ..	2.9	97	79	87	
United States..	100.0	81.5	85.5	82.6	

The proportion of last year's oat crop in farmers' hands on August 1 was about 6.3 per cent, or 63,249,000 bushels, as compared with 3.3 per cent (26,323,000 bushels) of the 1908 crop on hand August 1, 1909, and 5.8 per cent (50,394,000 bushels), the average proportion on hand for the past ten years on August 1.

The average condition of barley on August 1 was 70.0, as compared with 73.7 last month, 85.4 on August 1, 1909, 83.1 on August 1, 1908, and 85.3 the ten-year average on August 1. About 7,263,000 bushels, or 4.3 per cent of the 1909 crop was on farms August 1.

The preliminary estimate of the area of rye harvested is 1.7 per cent less than last year. The preliminary estimate of yield per acre is 16.3, against 16.1 bushels last year, 16.4 bushels in 1908, and a ten-year average of 16.0 bushels. The indicated total production is 32,088,000 bushels, against 32,239,000 finally estimated in 1909 and 31,851,000 bushels in 1908. The quality of the crop is 92.7, against 92.9 last year.

The acreage of buckwheat is about 816,000 acres or 2.2 per cent (18,000 acres) less than last year. The condition of the crop on August 1 was 87.9, as compared with 86.4 last year, 89.4 two years ago, and 91.1 the ten-year average on August 1.

The average condition of flax on August 1 was 51.7, as compared with 65.0 last month, 92.7 on August 1, 1909, 86.1 on August 1, 1908, and 88.4 the average on August 1 for the past seven years.

The preliminary estimate of the acreage of hay is 45,005,000 acres, or 1.6 per cent (739,000 acres) less than last year.

The average condition of the hay crop on August 1 was 83.0, as compared with 80.2 last month, 86.8 on August 1, 1909, 92.1 on August 1, 1908, and a ten-year average on August 1 of approximately 87.2.

These percentages by the statisticians indicate a total wheat crop of 669,000,000 bu., a decrease from last year of 68,000,000 bu. Winter wheat crop, 458,000,000 bu. second largest on record; gain over last year, 12,000,000 bu.; spring wheat crop, 211,000,000 bu.; reduction from last year, 79,000,000 bu. The three northwestern states have 153,000,000 bu., a reduction from last year of 79,000,000 bu.

The corn crop is the largest on record—2,940,000,000 bu., an increase over last year of 168,000,000 bu.

The oat crop sets a new record—1,009,000,000 bu., an increase over last year of 2,000,000 bu.

The rye crop is the same as last year. Barley is short 17,000,000 bu. Flax is short over 7,000,000 bu. Hay crop is 19,133,000 tons less than 1909.

Comparative condition, yields and acreage of all grains, flax seed and hay follows:

	Acreage.	Production, bu.			
		1910.	1909.	Aug., 1910.	Final, 1909.
Wheat—					
Winter	29,044,000	28,330,000	458,294,000	446,366,000	
Spring	19,742,000	18,393,000	211,000,000	290,823,000	
Totals	48,786,000	46,723,000	669,294,000	737,189,000	
Corn	114,083,000	108,771,000	2,940,000,000	2,772,376,000	
Oats	34,380,000	33,204,000	1,009,000,000	1,007,553,000	
Rye	2,155,000	2,006,000	32,239,000	32,239,000	
Barley	7,057,000	7,011,000	153,000,000	170,284,000	
Flax	3,103,000	2,742,000	18,250,000	25,856,000	
Hay	45,005,000	45,744,000	45,805,000	64,938,000	

The decrease in Utah's grain crop for 1910 is estimated at 500,000 bushels, corn nearly 200,000 bushels and rye about 10,000 bushels, while the decrease in the hay crop is estimated at 400,000 tons by State Statistician Haines. Of all grains oats alone are due to show an increase when final reports are in,

and this crop is expected to show a gain of approximately 450,000 bushels.

The condition of corn is given as 79, the same as in July, by the Michigan August crop report. Last August it was 84 and the crop was 53,000,000 bushels. Oats yield thirty bushels, against twenty-nine a year ago. Wheat yield estimated at eighteen bushels to the acre; rye fifteen bushels.

The indications are that Mississippi's corn crop will reach 55,000,000 bushels, breaking all records for that state. The

OHIO GRAIN NEWS.

BY E. F. BAKER.

The earlier receipts of new wheat at Toledo gave much promise and the quality was all that could be desired, but the quality has not held up to the earlier standard and much complaint is now heard among grain men. Dirt, mould, smut and cockle are prevalent in this week's (ending August 13) shipments, but it is thought that the quality at present is hardly a fair index of the general condition. It is probable that the worst is being worked off and that as time goes on there will be improvement. The volume is very satisfactory, receipts during the past week amounting to 519,500 bushels. Local stocks were increased last week 337,278 to a total of 606,000, and it is probable that the amount will be swelled to close to a million bushels before this week is over. Very little wheat is being shipped out, the total being limited to 6,000 bushels during the past week, which went to supply the small needs of scattered mills. The Ohio State Board of Agriculture estimates the total wheat yield at 24,316,629 bushels, but the idea is prevalent that these figures are far too low and that it will approximate 30,000,000 bushels. Prices have held up to expectations, 2 red wheat, track Toledo, closing August 9 at \$1.01 1/2 on the "Call."

New oats which have been received at Toledo have proven satisfactory in every respect. Kernels are well filled, and weights have run all the way from 33 to 36 pounds. The color is also very good and the yield is splendid. Estimates place the Ohio crop about 8 per cent above an average yield. It is expected that receipts will increase within the next few days, although a fair volume is already showing up. Receipts during the past week have aggregated 392,250 bushels, while shipments have amounted to 195,700 bushels, most of which has found its way into the Eastern market.

Owing to the fact that rain has not been general but has been limited to showers in various parts of the state, corn is inclined to be somewhat spotted. Those sections which have had the required amount of moisture, and that is the bulk of the state report a splendid prospect, while the drought has had an effect on corn prospects in other parts. On the whole there is an encouraging condition. The local supply of old corn is gradually decreasing and there is now only about 32,000 bushels on hand. A reasonable trade has been carried on receipts amounting to 49,850 bushels during the week, with shipments limited to 8,900 bushels. No. 3 yellow or better closed at 65c. on call, Tuesday, August 9.

Reports from various sections show that the hay crop is short and farmers are building additional silos, indicating that more than the usual amount of corn will go into feed of this sort.

One of the most spectacular fires that has visited Toledo in many years occurred recently when the old Wabash Elevator No. 4, located on the Maumee River bank on Middle Ground, about 1,000 feet north of the Lake Shore Railroad bridge, was destroyed. The elevator, which was empty, was about 250 feet long, 100 feet wide and 125 feet high, and was of wood covered with corrugated iron. It had been sold to E. L. Ensel, proprietor of the E. L. Ensel Wrecking Co., and about one-third of the structure had been torn down. It is not known how the fire started, but it was first discovered by railroad men working in the adjacent yards, who gave the alarm. Firemen immediately hurried to the scene, but the place was so hemmed in with strings of freight cars that they could not get their apparatus nearer than half a mile to the burning structure and the fire hydrant was about an equal distance away. The fire spread rapidly along the old dry walls and floors of the elevator and in 40 minutes there was nothing left of the elevator but a few smoking ruins. The firemen worked like heroes to save the trains of freight cars endangered by the blaze, but five or six empty ones were destroyed and 25 or 30 houses were ignited by flying sparks, although no real further damage was done. The loss is estimated at \$10,000.

Word was received in Toledo a short time ago announcing the death of A. H. Detwiler, a former well-known resident and grain man of Toledo. The decedent, who was 84 years of age, died at Phoenixville, Pa., death being due to old age. Mr. Detwiler had been in the milling business practically all his life. He owned and operated the Riverside Mills at Wheeling, W. Va., during the Civil War. In the 'seventies he operated the Market Square Mills in Philadelphia, and in 1892 he came to Toledo and took charge of the Detwiler Mill, known as the Corn City Mill, on Swan Creek. A year and a half ago he decided to return to his old home at Phoenixville, where he resided when he died. He leaves four daughters: Miss Mary Detwiler, of Toledo, Miss Mattie of Philadelphia, and Misses Ella and Kate Detwiler, residing at Phoenixville.

Court J. Coon, at one time connected with the J. J. Coon Grain Co., of Toledo, died recently in Orcutt, Cal., where he had resided for the past three years, being in the employ of the National Supply Co. Mr. Coon was the only son of the late Julius J. Coon, former head of the J. J. Coon Co. He was

29 years old and was born and reared in Toledo. He is survived by his wife and two sisters, Mrs. E. N. Riddle of Toledo and Mrs. Charles Stickney of Waterville.

I. H. Bell, aged 35, a hay and grain dealer of West Mansfield, O., had a narrow escape from being fleeced out of \$2,000 by an old confidence game. Bell alleges he was enticed into a game of matching dollars with Charles Sieropp, a traveling salesman of 20, and Charles Bernard, aged 25, a clerk, both of Toledo. The men told Bell he had won \$2,000 and one of them started to count out the money to him and then refused to pay it over until he could convince them that he could have paid had he been beaten. Bell went immediately to the Spitzer Banking Co. and tried to draw out \$2,000 on deposit there, telling the officers what he intended to do with the money. They saw through the deal and the young men were met and captured by the city police and are now being held pending an investigation. When searched, a roll of bogus bills was found in a belt about the waist of one of the men.

The Seeds, Grain and Hay Co.'s elevator and mill at Columbus was destroyed by fire recently, sparks from a passing engine or spontaneous combustion being blamed for the accident. The loss is \$27,000, half covered by insurance.

Max H. Hyman of Montpelier, O., has bought the elevators at Napoleon, Gallop and Prentiss of E. W. Newton and F. D. Willard, the Toledo receivers of the Travis-Emmick Co., the consideration being \$21,185. Fred Gerkin, owning a third interest in the Napoleon elevator, received \$4,686.67 for his share. The Travis-Emmick Co. went into the receivers' hands in May.

"Best since 1906" was the verdict of David Anderson, president and general manager of the National Milling Co., on the new wheat crop. The berries are unusually heavy and the quality satisfactory in every way with such ears as have arrived in Toledo.

Edwin L. Camp, president of the Produce Exchange and a member of the Toledo Grain & Milling Co., recently took an enjoyable automobile trip through Canada, going to Doderick via Windsor and London.

John Walper, of Riga, Mich., owner of elevators at Riga, Blissfield and Ogden Station, recently purchased the Deerfield Elevator of Weisinger & Munson, of Deerfield, Mich., the consideration being \$10,000.

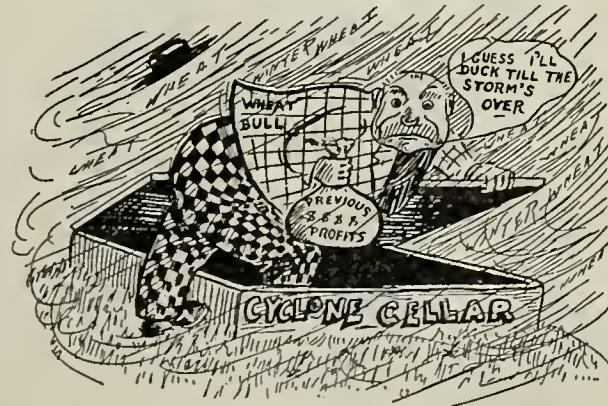
Justin Brewer, of Kenton, O., recently paid a visit to the Toledo 'Change. He had just returned from a trip to his ranch in South Dakota, where he makes a specialty of live stock. The combination of alfalfa and cattle has proven a winner for Mr. Brewer, who has profited heavily through irrigation.

Upon complaint of Chief Grain Inspector Culver, Judge O'Brien O'Donnell of the Juvenile Court has agreed to endeavor to stop the practice of railroads who allow children to sweep out cars. In the opinion of Inspector Culver this tends to make thieves of the youngsters, and he holds that the practice of sweeping out grain cars was largely responsible for the recent thefts of grain cars by children. The Chief holds that it is but one step from sweeping out a grain car to breaking into one. The Produce Exchange has agreed to work with the court in an effort to induce the railroads to break up the practice and keep children out of the railroad yards.

The following were recent visitors on the floor of the Produce Exchange: Frank Haldeman, Akron, O.; D. A. Baker, Butler, Ind.; L. Roy Urmiston, Tipton, Ind.; J. C. MacGinnitie, Chicago; Geo. B. McCabe, Sandusky; Emery Thierwechter, Oak Harbor, O.; Will Hurd, Monroe, Mich.; F. V. Welch, Zanesville, O.; E. H. Ash, Cleveland; J. E. Taylor, Fremont, Ind.; John Nutter, Paulding, O.; G. R. Forrester, Swanton, O., and F. C. Stewart, West Mansfield, O.

Chicago received a first car of new rye on July 30. It came from Illinois and graded No. 1.

The indications are that an elevator will soon be erected in Predmore, Olmsted County, Minn.



THERE'S BEEN A LITTLE TOO MUCH WHEAT MOVING THIS WEEK TO SUIT THE AVERAGE BULL. WILL THE FARMER STOP SELLING FREELY?—Zahm & Co., July 30.

The Ellis Drier Co.

One Firm Alone

Has installed within a year three of our largest Cold Air Dryers and Conditioners and one Hot Air Dryer, making four in all. Such facts need no letters of recommendation to bolster them up; they speak for themselves.

The Ellis Cold Air Dryer and Conditioner dries, cools, cleans, polishes and sweetens in one operation; in short, it is a general utility dryer and will handle any kind of grain in any condition with an excellent profit.

Ellis Dried Is Nature's Nearest Way

Postal Teleg. Bldg.

Chicago
U. S. A.

The CO-OPERATIVES

The Farmers' Elevator Co., of Sheridan, Ill., has been dissolved and the corporate property sold.

The Colman Elevator Co., Colman, S. D., handled last crop year 128,626 bushels of grain and made a net profit of \$40.34.

The Farmers' Elevator Co., Milbank, S. D., handled 188,000 bushels of grain crop of 1909 at a profit of 0.3c per bushel.

The Illiopolis Farmers' Grain Co., Illiopolis, Ill., will reorganize and sell new stock to cover losses which amount to about \$16,000.

The Farmers' Elevator Co. of Vermillion, S. D., has decided to close out its implement business and will not engage in the handling of machinery and implements in the future.

The Farmers' Elevator Co., Plankinton, S. D., handled 123,816 bushels of small grain, 27,321 bushels of corn, 1,302,000 pounds of coal and 58,000 pounds of twine and made about \$4,000 profit.

The manager of the Slifer Elevator Co., Slifer, Ia., disappeared on July 27, and it is said that a shortage of \$20,000 has been found in the company's accounts. An attachment has been secured on the manager's property.

The Strawn Farmers' Elevator Co., operating at Strawn and Risk, which failed some weeks ago, has raised money enough to stop the judicial sale of its properties and will resume business, paying its debts by an issue of 6 per cent preferred stock.

Farmers' Educational and Co-operative Union will build a farmers' exchange in Spokane, costing \$25,000. The building will be a center for buying and selling all farm and dairy products, and will be headquarters for all market information valuable to the farmers of this locality.

The Farmers' Grain & Coal Company of Saybrook, Ill., co-operative, organized about a year ago, has lost about \$8,000. Nine of the directors agreed to make up the shortage and take the elevator as security. A. Coon, manager, has resigned and John Reid is his successor.

At a meeting of shareholders of the Farmers' Elevator Co. at Fosston, Minn., about 100 farmers being present, it was decided to authorize the secretary to mail circulars to all those non-shareholders in the territory affected by the enterprise in order to secure additional members enough to warrant opening the elevator once more and in time to take care of this season's crop. The older members of the company said that unless the membership was doubled they would favor leaving the elevator closed during the coming season.

E. C. Morrill, buyer for the farmers' elevator at Junius, S. D., is in a state of mental collapse and nervous prostration, brought on by the announcement of a deficit in the elevator business managed by him the past season. A shortage of some \$3,000 to \$3,500 is reported, and worry over the outcome of the business under his management is believed to have brought on Mr. Morrill's present critical condition. The past season, as is well known, was a severe one in the grain business and numerous firms have failed because of the car blockade during the winter that held up thousands of cars in transit until the price had fluctuated away beyond the shipping margin. Heavy losses to dealers resulted.—Madison Sentinel.

Dividends paid on business crop of 1909: Farmers' Elevator Co., Hayti, S. D., 22 per cent and 4c per bushel on grain sold; Farmers' Elevator Co., Thompson, N. D., 50 per cent; Farmers' Co-operative Elevator Co., Lennox, S. D., 22 per cent; Farmers' Elevator Co., Dassel, Minn., 20 per cent; Farmers' Elevator Co., Kermet, N. D., 1c per bushel on grain sold; Farmers' Elevator Co., Melfort, Sask., 10 per cent; Watson Produce Co., Milan, Minn., 40 per cent; Farmers' Elevator Co., Kirkhoven, Minn., \$2,260.45 distributed, being the net profit on 336,000 bushels of grain handled; Farmers' Elevator Co., Fero, N. D., 25 per cent and 1c a bushel to the customers, provided the money was called for prior to August 10; Farmers' Elevator Co., Pennock, Minn., 20 per cent.

The Farmers' Grain and Supply Co., Spokane, Wash., is in the courts on petition of several shareholders for leave to bring suit against the trustees and the receiver, H. T. Ahern, the petition alleging that a collusion existed, and that the resources of the company were wasted. It is declared that the Company was in a prosperous condition, according to the financial report made to the stockholders July 1, 1908, that report showing assets of \$287,429.50, with liabilities amounting to only \$87,429.50; that in June, 1906, the capital stock had been increased from \$50,000 to \$200,000, and was fully paid, and notwithstanding this, the receiver's report in July, 1910, showed assets of the company to be \$62,217.09, with liabilities of \$81,236.05, showing a loss for the preceding year, under the last board of trustees, of \$219,018, for which no accounting has been made; that the court was misled as to the conditions when the receiver was

appointed, and H. T. Ahern, one of the trustees, was improperly appointed; that within three days after his appointment the property was sold at only a small part of its actual value and was bid in by O. M. Green, an interested party co-operating with the trustees; that at the last stockholders' meeting, held in June, 1909, the doors were locked and several of the plaintiffs who desired admittance were barred.

At a meeting of the local branch Grain Growers' Association at Carman, Man., on July 5 a resolution was passed asking D. W. McCuaig, president of the Manitoba Grain Growers' Association and head of the Government Elevator Commission, recently appointed, to resign from the former position. It was the feeling of the meeting that Mr. McCuaig could not very well fill both positions. Mr. McCuaig has since resigned as requested.

The annual meeting of the Grain Growers' Grain Company of Manitoba, held at Winnipeg on July 5, was a secret one, no reporter being admitted, but it transpires that it was a stormy one. A previous "private" meeting had been held on the 13th to arrange matters to block any measures that might be taken to criticize the company's methods, says the Winnipeg Telegram; and at the regular meeting the question was asked at the meeting what salary the directors received. After much hesitation it was explained that the president gets \$2,500 per year and each of the vice-presidents \$2,000. "These men," said one of the shareholders who was present, to the Telegram, "are Socialists, and they denounce those of us who want the profits paid out as dividends on shares. They even arranged to cut off the commission paid to agents for selling shares." A determined effort was made to compel the company to pay dividends and put the balance to reserve. Mr. Partridge moved that a dividend of 20 per cent be paid and that those shareholders who were not satisfied be allowed to resell their stock at par to the company. An amendment was moved that 15 per cent be paid and still another that 10 per cent be paid. After a long discussion the 15 per cent amendment carried. After the meeting a number of delegates expressed themselves as entirely opposed to the manner in which the business is being carried on and declared that they would carry on their resistance to the bitter end."

New oats reached Peoria on July 20—No. 4 white; Chicago on July 23—No. 2 mixed, and several cars of No. 2 white on the 25th.

The first car of new spring wheat was received in Chicago on August 1. It came from Illinois and graded No. 2, and sold at \$1.05. The first car last year was received August 9.

Kidwell & Good, millers and grain dealers at Elwood, Ind., have struck gas at a depth of 954 feet. The pressure is said to be stronger than that of any gas well put down there in eight years.

New Orleans in July exported 7,288.12 bushels of corn to Havre. This brings the total since September 1, 1909, up to 5,139,206.34 bushels, being an increase over the same period of 1908-9 of 976,255.50.

The Wisconsin State Tax Commission has ruled that grain in elevators at the time the annual assessment is made is subject to taxation as to other personal property and must be so listed by the elevator operators.

The D. Rothschild Grain Co. of Davenport, Iowa, has filed a bill in Chancery Court at Nashville, Tenn., against the Bell-Duff Commission Co., to recover \$3,875 alleged to be due on a contract in February last to purchase 50,000 bushels of oats. The same concern also filed a bill against Wilkes & Jordan to recover \$1,937.50 alleged to be due on a contract made in February to purchase 25,000 bushels of oats.

IN THE COURTS

The elevators owned by T. H. Pletsch & Co., at Parnell and Hallville, Ill., were levied on recently to satisfy executions amounting to about \$20,000.

E. D. Roberts, a Montgomery County, Iowa, farmer, was held for trial at the fall term of court in Vinton, Iowa, for selling 900 bushels of low seed corn at \$2.50 a bushel.

S. S. Offutt & Co., grain dealers of Georgetown, Ky., with extensive interests in the South, have assigned. Liabilities \$40,000; assets about \$20,000. The firm was founded twenty-five years ago.

Andrew Larson, manager of the Slifer Elevator Co., at Slifer, Iowa, who disappeared and whose books, it is alleged, showed a shortage of \$2,000, was arrested in Bristow, Neb., by the sheriff of Webster county, Iowa. He will be charged with embezzlement.

In District Court at Duluth, Minn., the Standard Grain Co. has been endeavoring to recover \$948 on a bond from the Fidelity & Deposit Co., of Maryland. Plaintiff alleges it lost this amount through a dishonest employee whose bond was furnished by defendant concern.

The Court at Cincinnati, Ohio, recently overruled the motion of the Union Grain & Hay Co. for a new trial in the city's condemnation suit in connection with the proposed Gilbert avenue viaduct, by which the concern was allowed \$84,000 for its property. The concern maintained that appraisers had placed the value at \$101,000.

Federal Judge Rose at Baltimore, Md., has made permanent the injunction restraining Virgil P. Randall, William B. Price, James A. Anderson, and Price & Co., from obtaining, using or selling the quotations from the Chicago Board of Trade. The preliminary injunction was issued last April and later the defendants were arrested on indictments charging them with operating a bucket shop.

John A. McDonald, president of the McDonald Grain Co. of Bay City, Mich., was arrested recently on the charge of issuing a forged bill of lading. The complaint was made by the Grand Trunk freight agent at Linden, Mich., from which point a car of beans against which the order is alleged to have been drawn was shipped. McDonald, who was released on \$1,600 bonds, asserts that the bill of lading was made in good faith, and that the transaction when explained was entirely proper and legitimate.

As an outgrowth of the failure of the Durant & Elmore Co., notice has been filed in Albany, N. Y., of a suit against the Delaware & Hudson Railroad for \$257,499 by Knight & McDougal, members of the New York Produce Exchange and the Chicago Board of Trade. It is for losses which plaintiffs allege they sustained through improper issuance of bills of lading by the railroad company. Plaintiffs allege that corn and other grain, for which they held bills of lading, was delivered by defendant company to grain merchants in other cities.

A receiver was recently appointed for a crop of oats in Posey Township, Ind. The application was made by Albert Burch, who alleged that he formed a partnership with H. Herold and rented ground and that the two were to pay equally for it, dividing the labor. Burch set forth that he furnished the seed and about two-thirds of the teams and labor and that when the crop was ready to harvest Herold ordered him to keep out of the field and insisted that he would harvest the crop himself. Burch asserts the crop will yield about 600 bushels and will be worth \$180.

Trustee Cochran of the T. H. Bunch Grain Co., and the referee in bankruptcy paid the Rock Island Railroad Co., a 25 per cent dividend amounting to \$25,000, on the judgment of the railroad recently obtained in the United States Court against the Bunch company for \$205,000 on claims for grain shipped to the latter concern on shippers' order upon which the Bunch company did not surrender the bills of lading. The judgment was secured on the ground that the railroad had been compelled to pay the shipper of this grain the value thereof since it had not obtained from the Bunch company the bills of lading covering the shipment before the grain was turned over to the railroad.

Alleging that collusion existed and that the resources of the concern were wasted, shareholders in the Farmers' Grain & Supply Co. have petitioned the Spokane County Superior Court, Spokane, Wash., for leave to institute action against the trustees and the receiver, H. T. Ahern. It is alleged that the concern was in a prosperous condition, according to the financial report made to the stockholders July 1, 1909. Notwithstanding this, the receiver's report in July, 1910, showed assets to be \$62,217.09, with liabilities of \$81,236.05, showing a loss for the preceding year under the last board of trustees of \$219,018, for which no accounting has been made. It is also alleged that the court was misled as to conditions when the receiver was appointed.



YESTERDAY SHORTS STRUCK A BUMP. TODAY THEY SLID ALONG NICELY.—Zahm & Co., August 6.

LATE PATENTS

Issued on July 12, 1910.

Process of Bleaching and Aging Cereals.—John M. Williams, Guthrie, Okla. Filed May 18, 1906. No. 963,970.

Dust Collector.—Arthur S. Wolf, Chambersburg, Pa. Filed May 5, 1909. No. 963,845. See cut.

Dust Collector.—Victor T. Johnson and Carl G. Arvidson, Minneapolis, Minn. Filed July 19, 1909. No. 964,428.

Grain Separator.—Richard Owens, Minneapolis, Minn., assignor to J. L. Owens Manufacturing Company, Minneapolis, Minn. Filed November 11, 1908. No. 964,307. See cut.

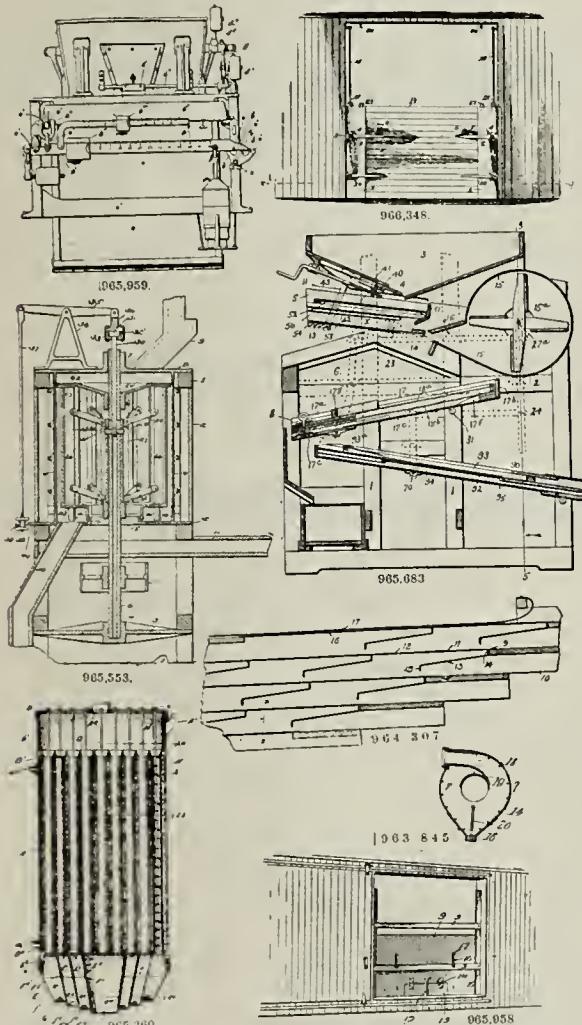
Issued on July 19, 1910.

Process of Separating Dust and other materials from Dust-Laden Air and a Dust-Collector for carrying out said process.—Charles F. Verrell, Grand Rapids, Mich. Filed July 2, 1908. No. 964,717.

Issued on July 26, 1910.

Grain Drier.—Frederick A. Wegner, Milwaukee, Wis., assignor to Milwaukee Grain Drier Company, Milwaukee, Wis. Filed April 27, 1909. No. 965,260. See cut.

Grain Huller.—Albert J. Baumann, Portland, Ore. Filed September 3, 1909. No. 965,553. See cut.



Combined Seed Grader, Cleaner and Purifier.—Charles B. Benson, Tippecanoe City, Ohio. Filed July 20, 1909. No. 965,683. See cut.

Issued on August 2, 1910.

Grain Car Door.—Abram L. Smock, Guion, Ind. Filed June 3, 1909. No. 965,958. See cut.

Grain Car Door.—William G. Douglas, Winnipeg, and William Robinson, Selkirk, Manitoba. (Re-issue.) No. 13,139.

Grain Door for Box Cars.—Samuel L. Murray, Milton, Pa. Filed February 21, 1908. No. 966,348. See cut.

Automatic Weighing Machine.—Andrew Sonander, Springfield, Ohio, assignor to the Winters-Coleman Scale Co., Springfield, Ohio. Filed March 22, 1909. No. 965,959. See cut.

THE STABLE BASIS FOR HIGH PRICES.

The Market Record has held consistently to the belief that high prices were still a factor to be reckoned with for some time to come. Even under the depressing speculative influences that put wheat prices to the low level of last spring and the bearish clamor of a return to low prices for good and all, our position never wavered because we have believed that the decreased purchasing power of the dollar based on the general advance in all commodities was economic and that the conditions that have brought this to pass still effectively maintained. This has never meant to us, however, that within

certain limits there should be no comparatively wide fluctuations in prices. The shifting in the commodity numbers proves that there are changes but the high general level at which the averages have been maintained proves the soundness of a permanently high cost of living period until there is a radical change in the underlying cause is justice.

We have just had called to our attention an article in the Springfield Republican, one of the ablest edited newspapers in the United States which is in line with our contention and which we reproduce for the benefit of those who would feel less apprehension about present prices if they could only grasp the essential factor affecting them and feel that the foundation under them was more substantial than mere cheap money inflation.

The article says in part:

The "evils of high prices" constitute one question; the causes of high prices are another question. What is monetary "inflation"? That is a term very familiar to the politics of the country in times past, and has been used almost exclusively in relation to paper money issues or to the free coinage of silver; it has seldom or never been popularly used in relation to gold.

There is of course no sound reason for this. There may be gold inflation as well as monetary inflation through silver or paper money. Whether money be of a credit character, or whether it be standard money, we have inflation when and only when the volume is so far increased as to bring about advancing prices and compel readjustment all along the line of prices, wages, interest and rents. There may be credit inflation with the money volume remaining the same. But there can evidently be no monetary inflation without due expansion of the volume or such an expansion as upsets the old relations between commodities and money, causing commodities to inflate or rise in price. This is what has happened in the case of gold.

It is right in prediction of gold inflation more certain and stable price conditions at the higher level now and lately prevailing than could have been possible under the unredeemable paper money inflation of the civil war. This is just what we have been asserting all along in assurance to business interests which in many cases are tremulous with fear that the present speculative reaction is to proceed until the bottom falls out from under the whole existing price and credit structure, and the country has been thrown down suddenly and permanently to the price levels of 15 years ago. This cannot possibly happen as long as gold production continues as it does and the mints are left open to its gratuitous and unlimited coinage.—Market Record.

Arrangements are being made at Pittsburg for a Land Show to be held on October 17th to 29th. The object of the exposition is to provide information for the farmer, the homeseeker and the investor regarding land openings and developments in all sections of the country, to show samples of the mineral, agricultural, horticultural and botanical products of the soil, and to teach the students and laymen educational facts concerning land reclamation and irrigation. The exhibits will include those of the United States Government, state exhibits, land and irrigation companies and state exhibits from all parts.

Kentucky is a great state for pools. They have tobacco pools, wheat pools and pools on the horse races. Large miller there writes: "Farmers in this locality selling wheat pooled on the market. Been great deal of pooled wheat in Kentucky this season, and various mills have been asked to bid on it. In this locality all such wheat has now been sold, and we understand in other counties the trades have been made. On account of this pooled wheat we think there will be much less carried in the country than usual, for all contracts require delivery at the earliest possible moment, and usually are limited to twenty days."—King & Co.

For Sale

[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

ELEVATORS AND MILLS

FOR SALE OR RENT.

A 20,000 bushel elevator at Washburn, N. D., for sale or rent. In the best of condition. Reason for selling, too much other business. Address

PAUL S. MEYER, Washburn, N. D.

ELEVATORS AND MILLS

FOR SALE.

Elevators in Illinois and Indiana that handle from 150,000 bushels to 300,000 bushels annually. Good locations. Prices very reasonable. Address.

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NORTHERN KANSAS ELEVATOR FOR SALE.

Elevator in fine farming district in northern Kansas for sale. Only grain business in town. Good crop prospects this season. Address

KANSAS, Box 8, Care of "American Elevator and Grain Trade, Chicago, Ill.

NEB. ELEVATOR FOR SALE OR TRADE

Eastern Nebraska elevator of 15,000 bushels capacity for sale; or will trade for land. Have so much other business that I cannot handle it. Coal business with 14 bins in connection with elevator. Address

GEO. E. HOTCHKIN, Minden, Neb.

WISCONSIN ELEVATOR FOR SALE.

For sale at a bargain, elevator and warehouse located in one of the best towns in northern Wisconsin; finest hay, grain and potato section in the state. Capacity 70,000 bu. grain; 50,000 bu. potatoes; 600 tons of hay. For further particulars address

FARMERS' PRODUCE CO., Chippewa Falls, Wis.

OHIO ELEVATOR FOR SALE.

Fine grain elevator of 20,000 bushels capacity, fully equipped, for sale. Has wool or seed room and large coal sheds, also side track. City of 25,000, in good grain country. Appraised at \$9,000; will sell at \$8,500, \$3,500 down and balance on time. Fine opportunity. Address

G. W. BAHL, Mansfield, Ohio.

FINE WAREHOUSE AND CHOP MILL FOR SALE.

A \$30,000 brick warehouse and 65x140 chop mill for sale. Storage about 60 cars hay, 10 cars grain. Complete grinding equipment, electric power. Elevator scales. Private switch 186 ft. with 10-foot loading and transfer dock. 44x150 vacant adjoining. Good will and long established business goes with property. Increasing in value all the time. A snap for man who wants to step right into an old established and paying Hay, Grain and Mill Feed business, Wholesale Retail, Commission and Shipping. (Alfalfa trade alone is an attractive business.) Terms easy. Reasons for selling, have made enough and want to retire. For full particulars address

BOX 595, Kansas City, Mo.

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Gasoline engines for sale; 5, 7, 10, 20, 30 and 45 horsepower.

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One 34 H. P. Miami Gas or Gasoline Engine for sale. In good running order.

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A 20 H. P. steam engine and 25 H. P. boiler with 40 ft. of smoke stack, for sale. Chandler & Taylor Co. make. Engine has been run under careful conditions and is as good as new. Address

BRYCE FARMERS GRAIN CO., P. O. Milford, Ill.

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Wagner Publications—“GRAIN INVESTMENTS”—“WAGNER CROP BOOKLET” and “THE WAGNER LETTER.” Statistical information covering the grain markets furnished instantly.

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A No. 1 Clipper Seed Cleaner in good condition for sale. Full set of riddles. Price \$10, F. O. B. Richmond, Ind. Address

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An 80 H. P. New Erie Dayton Gas Engine for sale cheap. Guaranteed to be in good condition. Good reason for selling. Address

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Modern railroad track scale for sale. In first-class condition. Address

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Mixed cars of flour and mill feeds in 100-pound sacks are our specialties. Would like to send you a trial order to convince you of the superiority of our products.

ANSTED & BURK CO., Springfield, Ohio.

Miscellaneous Notices

[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

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Elevator or mill and elevator for good improved Illinois or Iowa farm. Address

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29 Chamber of Commerce

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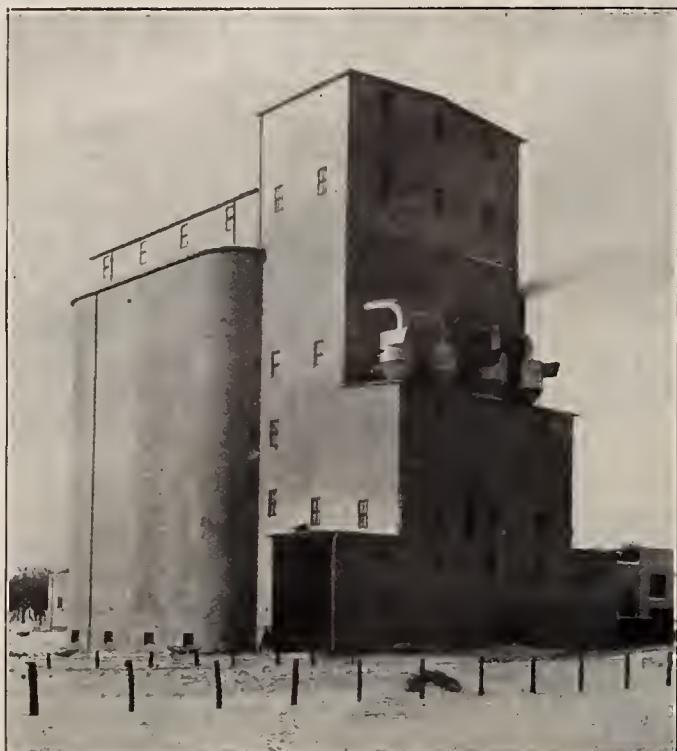
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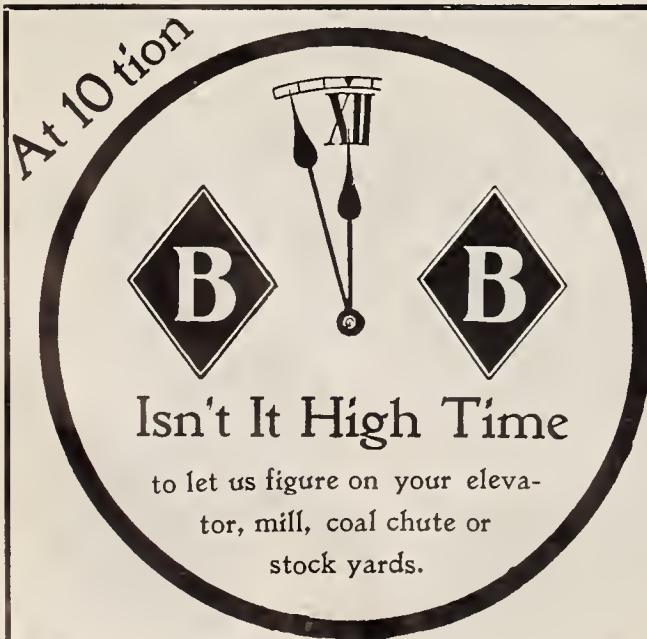
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"The velocity of air on suction side of fan is always greater in the "1905" Cyclone Collector, due to its lower resistance and consequent greater air handling capacity."

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The New Cyclone "1905" manufactured exclusively by

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Recently Completed Mill Storage ; 6 Tanks
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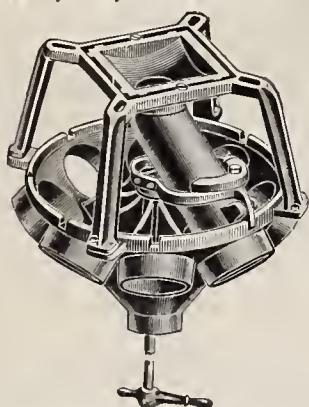
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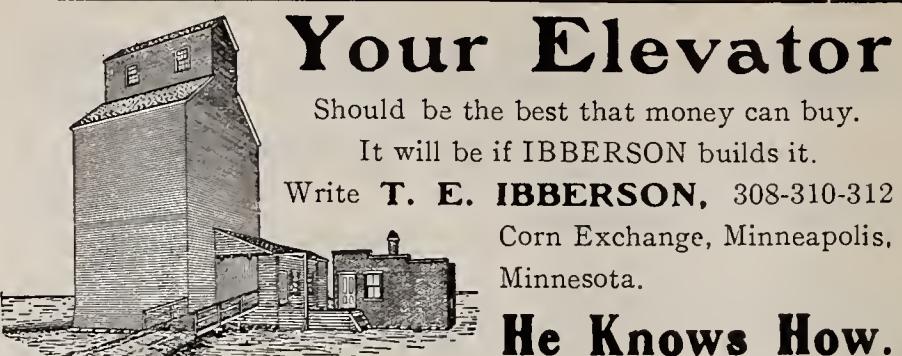
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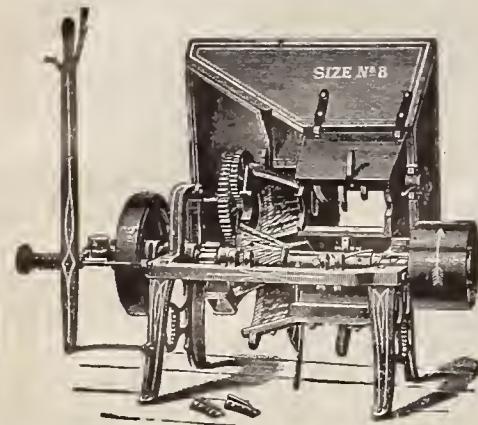
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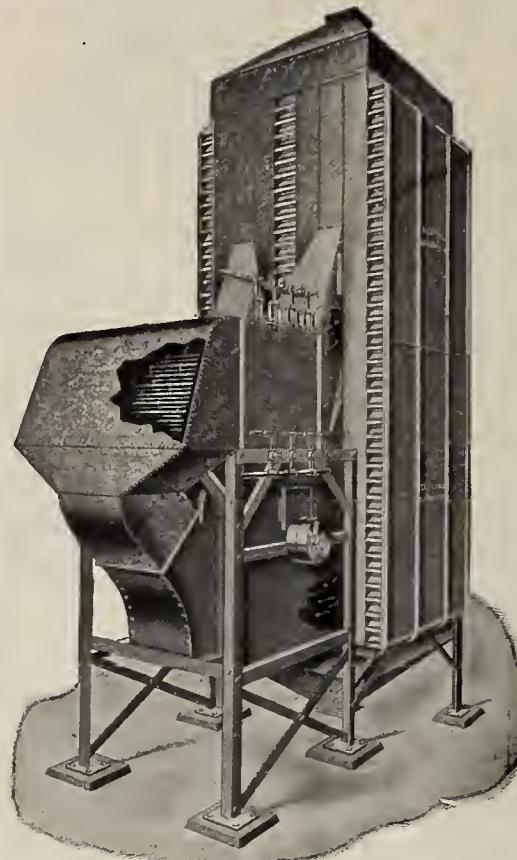
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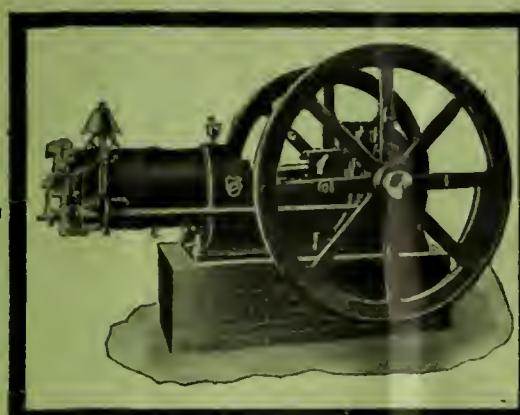
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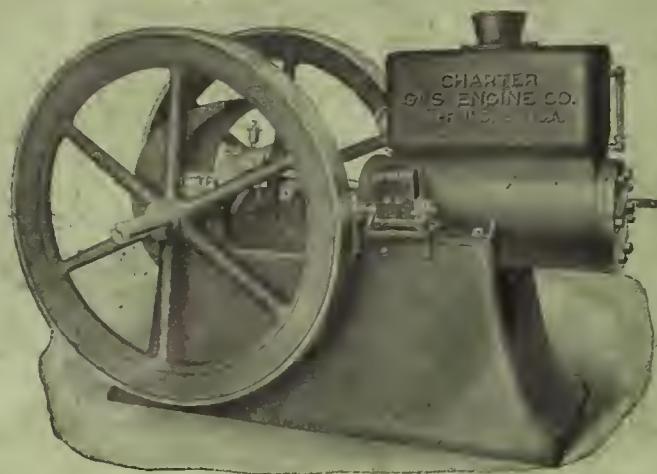
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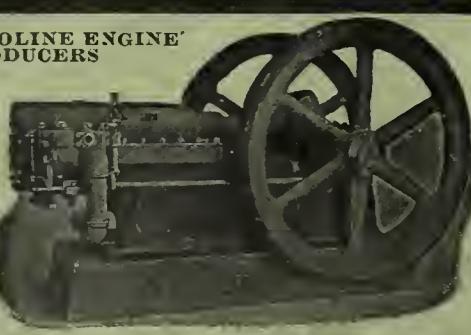
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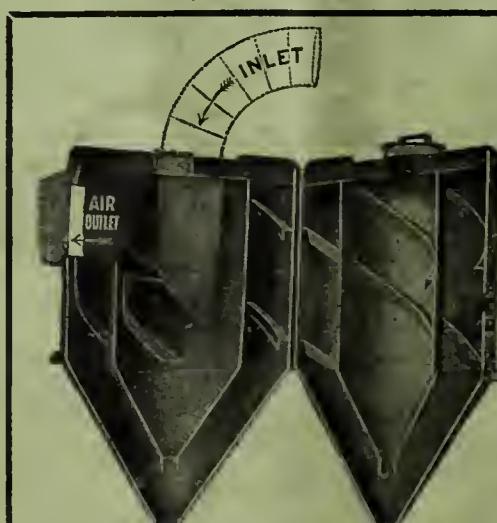
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